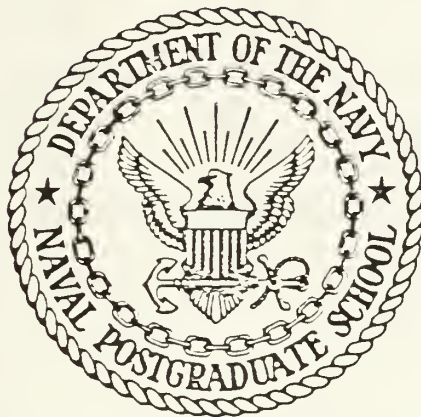


NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

THE CHANGING ROLE AND CAPABILITIES
OF THE ITALIAN NAVY

by

Daniel Doyle Lucas

June, 1984

Thesis Advisor:

David P. Burke

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The influence of historical forces, NATO commitments, domestic economy and politics, and commercial interests are the key elements considered. A brief review of the three services and their present force structure deployment and missions is necessary to attain a proper perspective on the Navy's role, objectives and associated problems. All of the above factors have had some influence on the changing role and capabilities of the Italian Navy. Under current conditions, the Navy is capable of adequately accomplishing its assigned mission. Any added burden placed upon it by a change in NATO's strategy (a decrease in regional forces) or a sudden down-turn of the economy, would probably degrade its capabilities considerably.

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The Changing Role and Capabilities of the Italian Navy

by

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Lieutenant Commander, United States Navy
B.S., California Maritime Academy, 1973

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

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I. INTRODUCTION

Today the international environment is more dangerous than ever for the United States. American interests and commitments are incessantly challenged in one strategic region after the other. The current situation is all the more serious because America's political and military forces are spread so thinly throughout the world. The United States cannot hope single-handedly to maintain peace and stability simultaneously in every important geographical region. This problem necessitates cooperation with, and reliance upon, certain of our more determined allies. A primary case in point is that of the Mediterranean.

Our involvement in the Mediterranean is dictated by the extreme geo-political importance placed on that area by the leaders of both the Western Alliance and the Soviet Union. Increasing Soviet political and military power in this inherently unstable locale has placed an added burden on the already strained forces of the West. Several factors have contributed to the present difficulties experienced by NATO in the sphere of Mediterranean naval operations: the large-scale withdrawal of British forces in the late 1970's; the uncertainty of French participation in the event of a regional or global military crisis; and the possible decrease of readily available U.S. forces due to pressing commitments elsewhere. One of America's staunchest

allies in the region is Italy. This nation's central location makes it the linch-pin in the defense of NATO's southern flank and the Mediterranean. As a result, the role and capabilities of Italy's Navy are of extreme importance. Current trends, and future prospects, give every indication that the Italians will be obliged to accept an increasing share of the regional defense burden.

The Italian Navy is presently undergoing an extensive modernization and reconstruction program. The ultimate goal of this study is to provide an assessment of the potential impact of Italy's evolving force improvements on NATO's maritime capabilities in the Mediterranean.

To accomplish this goal, four potential factors that may have governed the process leading to the Navy's recent improvement efforts will be investigated. The influence of historical forces, NATO commitments, the domestic economy and politics, and commercial interests are the key elements for consideration. A brief review of the present force structure of the three services, and of their deployment and missions, is necessary to attain a proper perspective on the Navy's role, objectives and associated problems.

Once the degree of influence exerted by the individual factors is understood, the actual assessment can be undertaken. This can only be accomplished by considering the force of all these factors as they interact with one another to form a single entity. Each influences the others to some

extent, and is, in turn, influenced by them. The difficulty lies not only in determining which elements are the strongest, but also in perceiving the impact of a future change in such strength.

The importance of the Italian Navy should not be underrated. The future integrity of NATO's Mediterranean defense, and the very stability of the region, could well depend upon the capabilities and cooperation of Italy's maritime forces.

II. THE INFLUENCE OF HISTORICAL FORCES ON THE ROLE OF THE NAVY

The Italian Navy is relatively young in comparison to the other major Western services. It was formed on 17 March 1861 as a result of Italy's unification under Cavour.¹ The parent service was comprised of the smaller Neapolitan, Venetian, Tuscan and Pontifical fleets. Though a newcomer by contemporary standards, the Navy is steeped in tradition and has been influenced by its historical experience in both World Wars.

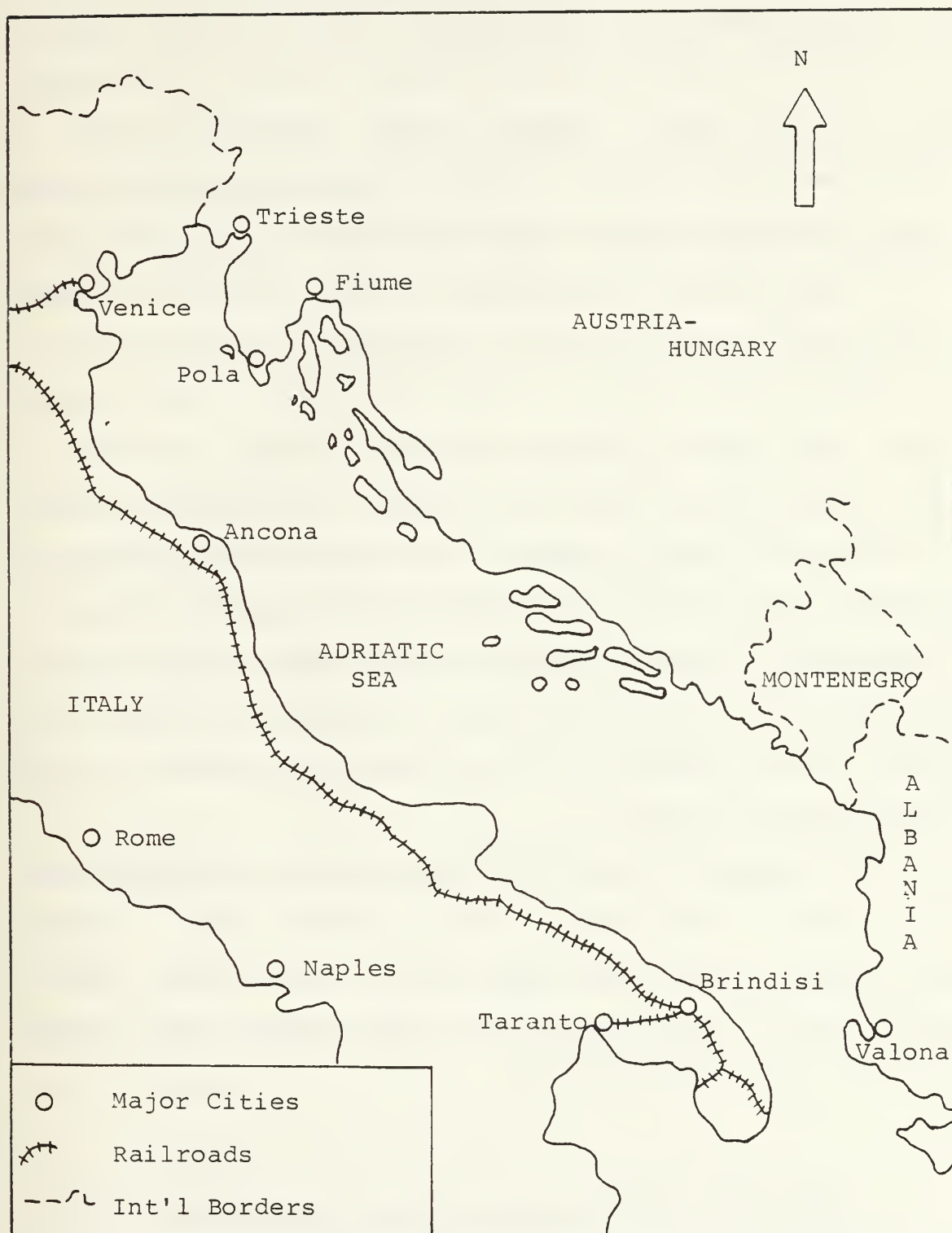
This chapter will consider the Navy's involvement in the two largest conflicts of this century. An examination of Italy's maritime performance and the lessons learned will provide some insight into the historical forces that have helped mold the current force structure and policies of the Italian Navy.

A. WORLD WAR ONE

Italian naval operations in the First World War were almost exclusively limited to the Adriatic Sea. Italy's primary adversary throughout the war was the Adriatic fleet of the Austro-Hungarian Empire. Italian strategy was

1. Attivita Promozionali della Marina Militare, La Marina Militare Italiana, Rome: Stampa Stilgraphical, 1983, p. 7.

FIGURE 1
THE ADRIATIC 1915-1918



greatly influenced by the geographical conditions in the main area of operations.

The Adriatic Sea is roughly 460 miles long from the Gulf of Trieste in the north to the island of Corfu in the south. Its average width, between nearly parallel shores, is approximately 90 miles. The Straits of Otranto form a strategic choke-point where a distance of only forty miles separates the Italian and Albanian coasts. The east and west coasts differ significantly in character. Italy's shoreline is shallow and lacking in sheltered ports. On the other hand, the eastern side is generally rugged, screened by numerous islands and has an abundance of excellent harbors. The principal Italian coastal cities were Venice, Ancona and Brindisi. The latter was converted into an important naval base during the war. On the eastern coast, the cities of Trieste, Fiume and Valona were of strategic importance. The harbor town of Pola was the primary headquarters of the Austro-Hungarian Navy.

Italy denounced the Triple Alliance and declared herself on the side of the Entente Powers on 23 May 1915. The Navy immediately found itself operating in an actively hostile environment. The Italian Fleet was burdened with several strategic responsibilities:²

2. The Times, History of the War: Volume XII, London: The Times Printing House, 1917, pp. 308-309.

1. Maintenance of the blockade at the Straits of Otranto. This task was eased somewhat by the assistance of several units of the British and French Mediterranean fleets.

2. Maintenance of the sea lines of communication with Montenegro and Albania.

3. Protection of the major cities and commercial interests along the Italian coastline of the Adriatic.

4. Masking and containment of the Austro-Hungarian Fleet at Pola.

5. Logistical, off-shore bombardment and other such flanking support as required for the Italian Army in its advance along the Friuli coast to the seaport of Trieste.

Upon entrance into the War, Italy found herself with a strong, capable Navy that quickly and effectively tightened its grip on the enemy by both sea and air. During the period of neutrality, the Italian leadership had utilized the industrial resources, shipbuilding yards and foundaries to enhance the capabilities of an already vigorous maritime force.

The size of the Italian fleet was second only to the French Mediterranean forces. With these two nations allied, overall control of the Adriatic was never seriously contested by the Austro-Hungarians. Italy started the war with

a battle fleet consisting of: 6 "Dreadnoughts"; 10 battleships; 10 armored cruisers; 33 destroyers; 67 torpedo-boats; and 20 submarines.³

The "Dreadnought" class ("all big gun" ships) was of three distinct types. All of these vessels were launched between 1910 and 1913. These warships were the epitomy of Italian engineering genius at the time. They were characterized by their great size (20,000+ tons), heavy armament (12" main batteries) and relatively high speed (22-23 knots, sustained). Owing to the nature of the conflict in the Adriatic, these units did not have an opportunity to engage the enemy fleet during the war. The mere presence of such behemoths certainly influenced the strategic situation in this theater of operations.

The battleships and cruisers which supplemented the Dreadnought divisions were relatively powerful and efficient designs when compared with their contemporaries in other navies. All but the three smallest carried main armaments of 10" guns (or greater). The destroyer and submarine squadrons were well developed. These vessels were manned by capable and stout-hearted crews. The worth of torpedo craft had been established during the Italian war with

3. Fred T. Jane, ed., Jane's Fighting Ships - 1914, London: Sampson Low, Marston & Co., Ltd., 1914, pp. 286-314.

Turkey just three years before the current hostilities. Rear Admiral Enrico Millo, the Italian Minister of Marine, 1913-1914, was awarded the Medal for Military Valor for leading a torpedo-boat squadron during the conflict in 1912.⁴

At the start of the war, the Imperial and Royal Austro-Hungarian Navy was composed of the following ship types:⁵

Battleships	15
Armored Cruisers	2
Light Cruisers	4
Destroyers and Torpedo Boats	48
Submarines	6

Naval combat operations in the Adriatic were generally of the nature of small hit-and-run raids. The prime reason for this was an apparent unwillingness by the Austrian admiralty to pit their major units against their Italian contemporaries. As a result of this lack of motivation, at any given time, the bulk of the Austro-Hungarian fleet remained safely moored within the heavily fortified seaport of Pola. While the capital ships of the two navies were not utilized against one another in a direct open-ocean battle, they were

4. La Marina Militare Italiana, p. 9

5. Anthony E. Sokol, The Imperial and Royal Austro-Hungarian Navy, Annapolis, MD.: United States Naval Institute, 1968, p. 87.

involved in key supporting roles throughout the duration of the conflict. Battleships sailed forth from Pola on several occasions to render aid to the often hard-pressed destroyers of the Austro-Hungarian raiding forces. The Italians made more extensive use of their large ships on combat patrols and as reinforcements for smaller fleet units when hotly engaged by the enemy's counterparts.

The typical fleet actions, though small in scale, were not lacking in audacity and ferocity. The following account of one such action, issued by the Italian Chief of the Naval General Staff on 28 May 1915, is a fair representation of numerous such occurrences:

"We have only to regret the loss of a small old destroyer, built in 1901, of 330 tons, the TURBINE. On the morning of May 24 this vessel was engaged in scouting duties when she sighted an enemy destroyer. She at once gave chase, thus becoming separated from the main body of the naval detachment of which she formed a part. The pursuit lasted for about half an hour when four other enemy ships came up, three destroyers and the light cruiser HELGOLAND. The TURBINE thereupon fell back on her detachment, but having been hit twice in her boilers she lost her speed. Nevertheless she continued to fight for about an hour in spite of fire which broke out on board. Then her ammunition being exhausted, her commander ordered her seacocks to be opened in order to sink the vessel and prevent her capture by the enemy

"The TURBINE began to sink, but in spite of the fact that she had ceased fire, and that the crew was drawn up in the stern in such a serious plight, the enemy continued to shell her from a short distance. The commander, who had been wounded at the beginning of the action, when he saw that the vessel was about to sink, ordered the sailors to jump into the sea. The Austrian destroyers launched boats to help the swimmers, but at this moment, catching sight on the horizon of the naval detachment to which the TURBINE had belonged, the enemy rapidly recalled his boats and made with all speed for

his own coast. Our vessels, leaving lifeboats behind, pursued the enemy, opening fire. A destroyer of the TATRA type and the HELGOLAND were hit several times and were seriously damaged. Nine of the TURBINE men were rescued."⁶

The judicious employment and tactical effectiveness of submarines, by both antagonists, provided the most serious threat to maritime forces operating in the Adriatic. The submarine was a relatively new weapon of destruction. The geographical conditions of the theater greatly enhanced the already potent capabilities inherent in submersibles.

The Italians suffered greater losses to the undersea menace than did the Austro-Hungarians. This was due, in large part, to the more aggressive employment of Italian surface units and the corresponding large number of ships employed. The Austrian policy of maintaining the bulk of their fleet in port presented Italian submarines with a paucity of targets. Consequently, Italy's submarine squadron was tasked with the primary missions of scouting and blockade duty. The Austrians did not escape wholly unscathed. (See Figure 2.)

Shortly after Germany's inauguration of unrestricted submarine warfare in early 1917, Italian merchantmen became unwilling participants in their country's war at sea.

6. The Times, History of the War, p. 328.

FIGURE 2

NAVAL LOSSES TO ENEMY SUBMARINESITALIAN

<u>Ship Name</u>	<u>Ship Type</u>	<u>Date Sunk</u>
MEDUSA*	SS	17 June 1915
AMALFI	CA	7 July 1915
GIUSEPPE GARIBALDI	CA	18 July 1915
ANCONA	Passenger Liner	7 Nov. 1915
IMPETUOSO	DD	10 July 1916
NEMBO	DD	16 Oct. 1916

AUSTRIAN

U-12*	SS	11 Aug. 1915
MAGNET	Gunboat	2 Aug. 1916

Source: The Times, History of the War: Vol. XII,
 London: The Times Printing House, 1917,
 pp. 316-321.

* Both of these vessels were sunk in rare encounters with their enemy counterparts.

Commercial shipping losses averaged 4 to 5 steamers a week. A new and equally sinister threat posed by submarines was that of underwater mine-laying. Between July 1915 and March 1916, the Austrian submarine UC-12 conducted a series of such operations off an Italian naval base. On 16 March 1916, a large underwater explosion at the entrance to the base caused the Italians to investigate and subsequently raise the remains of the UC-12. Apparently, one of the

mines detonated prematurely during its launching with unfortunate results for the submarine.⁷

Italian naval aviation was a fledgling service at the outbreak of the war. Its lighter-than-air and fixed-wing units played a key role in cross-raiding in spite of this. Italy's naval leadership exercised inventiveness and flexibility in the field of aeronautics at a time when the wartime use of seaplanes and airships had not been given any serious consideration. The opening of the Marine Flying School at Venice in 1913 and the modification of the cruiser ELBA for balloon-tending service are examples of Italy's pioneering spirit in this field.

In late May 1915, Italian airships began flying missions against important targets along the Austro-Hungarian coast. These attacks were concentrated on the shipyards, port facilities and railway junctions in the vicinity of Trieste. The airships enjoyed a moderate degree of success which included damage to the Austrian battleship ERZHERZOG FRANZ FERDINAND.⁸ Despite several casualties inflicted by hostile aircraft and anti-aircraft, the effectiveness of the airship in a wartime role was firmly established.

7. Ibid., pp. 325-326. It is interesting to note that the only Austrian item found onboard the craft was the flag. Both the vessel and crew were of German origin.

8. Ibid., p. 321.

Seaplanes were employed with equal or even greater effectiveness by the Italians. Naval aircraft were utilized on both patrol and raiding missions. Offensive operations were conducted against Austrian seaports, shipyards, railways and communication installations with varying degrees of success. Several large raids consisting of 20 or more Caproni bombers were conducted in the later period of the war. These included attacks against the Whitehead torpedo and submarine works at Fiume (8 August 1916) and on Lloyd's arsenal and the seaplane sheds near Trieste (early September 1916).⁹ One interesting aspect of these "mass" raids was the effective employment and coordination of fighter escort and naval destroyers in support of the bombers.

The Italians are renowned for developing unique solutions to oftentimes difficult problems. One particular problem involved "cut-and-run" raids on Italy's Adriatic shoreline by Austrian naval units. Roughly 500 miles of Italian coast was virtually undefended in regard to permanent fortifications. One of the more innovative defensive measures to be employed was the use of armored trains that were manned by Italian naval personnel. These units were organized along the lines of a warship and were crewed by approximately 70 naval officers and ratings.¹⁰ Many

9. Ibid., p. 323.

10. Ibid., p. 325.

such trains were stationed along the coastal rail line stretching between Venice in the north and Brindisi in the south. (See Figure 1.) Once an enemy raiding force was sighted, several trains would converge on that location and utilize their heavy guns and anti-aircraft batteries to drive off the attacking ships. The mobile land fortresses were so effective that raids by the Austrian fleet eventually ceased almost entirely.

The development of the Italian Navy during the inter-war years was influenced to no little extent by the lessons learned in the Adriatic between 1915 and 1918. The necessity for maintaining a fleet of fast, heavily armed surface ships and the expanding capabilities of airpower in a maritime role were taken into consideration by the military's policy-makers in the 1920's and 1930's. But it was the devastating effectiveness of the submarine, and the potential usefulness of this weapon in a future maritime conflict, that had the greatest impact on the evolving structure and character of the Italian Navy. Italy's submarines had demonstrated their worth many times over in tasks of scouting, blockades, attack and special operations. The submarine was a proven asset as a commercial raider and anti-sea lines of communication weapon. Italy had been made painfully aware of this through substantial losses of merchant steamers to attacks delivered by underwater vessels. Evidence that the Italians considered this a serious menace

is ample. During the First World War, Italy hurriedly developed and constantly improved upon her submarine defenses. These defenses included effective armament for merchant vessels, extensive use of radio, and improved subchasing techniques.

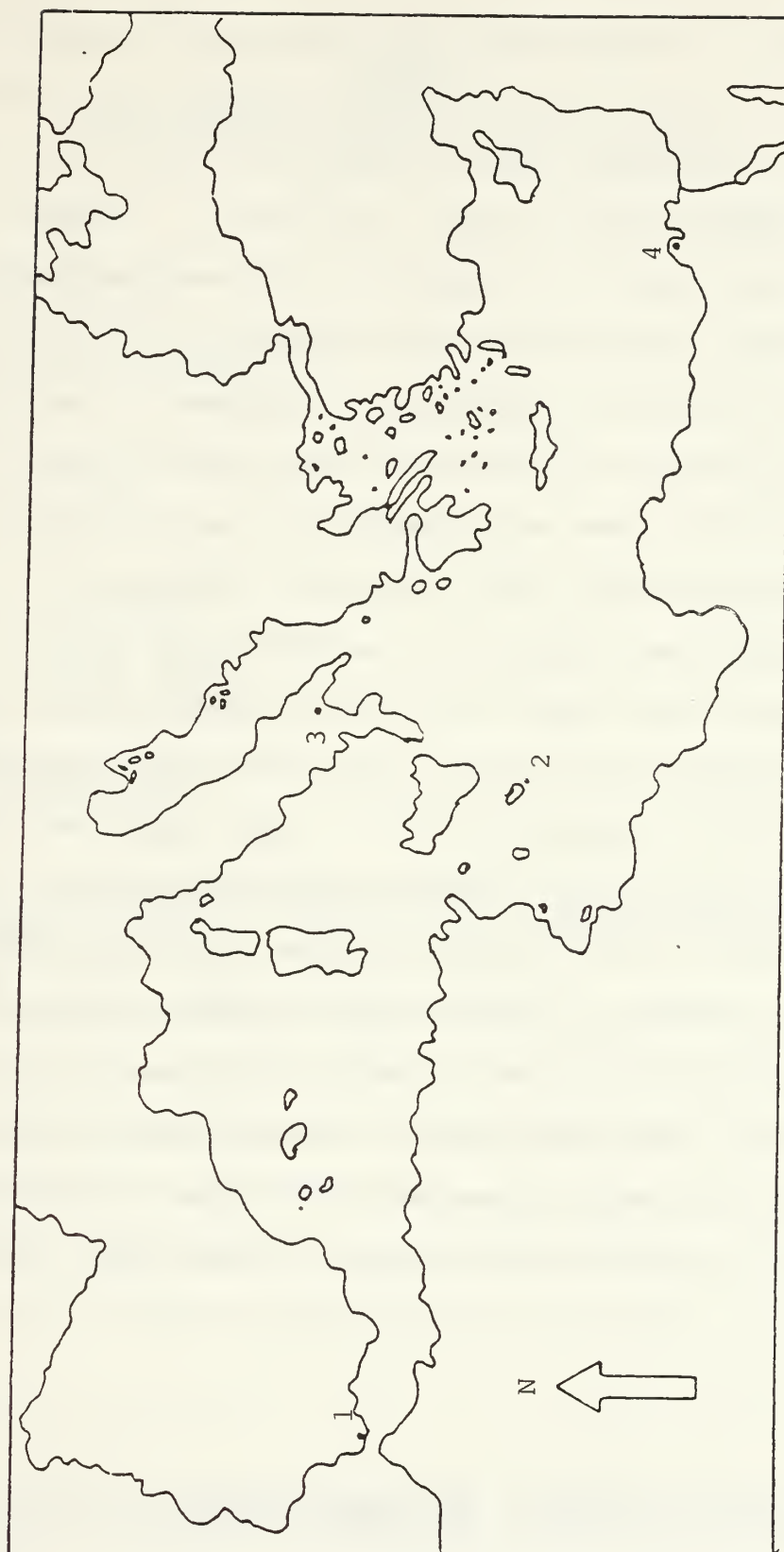
The rapid expansion of Italy's submarine forces in the inter-war years is further proof of the importance attached to the experience gained by the Navy in sub-surface warfare.

B. WORLD WAR TWO

On the 10th of June, 1940, Italy declared war on France and Great Britain. During the following three years of Italian participation in the Mediterranean conflict, Italy's Navy would experience a variety of stunning successes and shattering defeats. The Navy's operations would cover the entire Mediterranean Sea, at one time or another, during the war. The strategic situation was considerably changed from the one confronting the Italians in the First World War. Italy's old enemy, Germany, was now a partner. Conversely, her Navy was now facing two hostile fleets of considerable size. British control of both major exits from the Mediterranean, the Strait of Gibraltar and the Suez Canal, greatly restricted Italy's naval options. Her sizeable Navy was, in effect, restricted to a rather limited theater of operations. (See Figure 3.)

FIGURE 3

THE MEDITERRANEAN SEA



1. Gibraltar 2. Malta 3. Taranto 4. Alexandria

Thanks to an ambitious naval construction program during the inter-war period, the Italian Navy was a relatively large and formidable force. The fleet consisted of approximately forty capital ships, 120 smaller units and a submarine force touted by Mussolini (although actually second to the Soviet Union's) to be the largest in the world. (See Figure 4.) While the quantitative aspects of the fleet were impressive, certain limitations were quite evident. A large number of submarines was commanded by petty officers due to a serious shortage of qualified officers.¹¹ Italian warships had been designed or modified for speed and heavy fire power. Many were up to five knots faster and could engage in battle from longer ranges than their British counterparts as a result of this. The necessary trade-off between offensive and defensive characteristics was quite severe. Most of the Italian cruisers were so thinly armored that many referred to them as the "cardboard fleet".¹²

The defeat of France, in early 1940, removed a considerable threat from the theater. The British Mediterranean Fleet was initially comprised of three battleships, one aircraft carrier, five cruisers, thirty-six destroyers,

11. A.B.C. Whipple, The Mediterranean, Alexandria, VA.: Time-Life Books, 1981, p. 12.

12. Ibid., p. 60.

FIGURE 4

The Italian Order of Battle - 1939

<u>Type</u>	<u>Number</u>
(New) Battleships	4
(Old) Battleships	4
(New) Heavy Cruisers	5
(Old) Heavy Cruisers	2
(Building) Cruisers	(14)
(New) Cruisers	12
(Old) Cruisers	2
(New) Destroyers	28
(Old) Destroyers	31
(New) Torpedo Boats	37
(Old) Torpedo Boats	32
(New) Submarines	92
(Old) Submarines	18
(WWI) Submarines	7

Source: Francis E. McMurtrie, ed., Jane's Fighting Ships 1939, London: Sampson Low, Marston & Co., Ltd., 1939, pp. 255-300.

eight submarines, and a small number of support vessels.¹³ In addition to this, three small reserve forces were stationed at Malta, Alexandria and Gibraltar. During the course of the war, the British would substantially increase the size of their forces with notable emphasis on enlarging the number of submarines and aircraft carriers.

13. Francis E. McMurtrie, ed., Jane's Fighting Ships 1939, London: Sampson Low, Marston & Co., Ltd., 1939, pp. 10-11.

The missions of the Italian Navy were primarily twofold:

1. Gain sea-control for the Axis powers while simultaneously denying it to the enemy; and
2. Protecting the Axis sea lines of communication while interdicting those of the Allies.

It is not surprising that the Royal Navy was tasked with similar missions. The degree of success enjoyed by the two belligerents can best be illustrated by considering some of the major actions that took place in the earlier stages of the conflict.

There was a marked contrast in the style of leadership within the opposing forces. The British Commander, Admiral Sir Andrew Browne Cunningham, was an aggressive and audacious leader seasoned in action during the First World War. His initiative and daring did much to bolster the effectiveness of his outnumbered fleet. Admiral Inigo Campioni was the Commander-in-Chief of the Italian Navy. He was a capable but highly conservative officer.

The strategy Campioni evolved, with the help of his staff, was fairly well-balanced and took into consideration the previously noted shortcomings of his fleet. His primary strategy relied heavily on the multitude of submarines and torpedo boats to perform sea lines of communication interdiction and certain sea-control missions. The larger vessels would be utilized to escort convoys to North Africa in swift forays. The bulk of the fleet would stay safely

moored at the main naval base in Taranto the rest of the time.

It was clear to both sides that the tiny island of Malta was a key factor in the battle for control of the Mediterranean. The British forces stationed there could easily confront the Axis convoys making the transit to North Africa. Conversely, if the island fortress could be captured, Italian ships and planes stationed there could perform devastating strikes against British convoys. The Mediterranean could ultimately be closed to Allied shipping altogether. It was this manner of thinking that brought about the first notable battle between forces of the Italian Navy and the Royal Navy.

Admiral Cunningham insisted on holding Malta despite arguments to the contrary by the Army and Air Force. The island was subjected to a large number of air raids immediately after the outbreak of hostilities. The frequent visits of the Italian Air Force made Malta so hazardous that the Royal Navy's surface warships were forced to depart for the safety of Egyptian ports. In early July, Cunningham's fleet left their anchorage in Alexandria enroute for Malta with the intention of evacuating Cunningham's headquarters personnel.

On July 8, 1940, the British submarine, PHOENIX, reported sighting a large naval force some 200 miles east of Malta heading toward the African coast. A long-range RAF

observation plane (dispatched from Malta) sighted the Italian fleet heading north toward Taranto. The plane signaled that the force consisted of two battleships, six cruisers and seven destroyers. The British fleet headed for the instep of the Italian boot with the hope of cutting the enemy off from Taranto.

The ensuing action off Reggio di Calabria (a town located on the toe of Italy near the Strait of Messina) would be a textbook battle for the British. On the morning of July 9, three planes from H.M.S. EAGLE were sent to pinpoint the enemy. By mid-afternoon a British cruiser had engaged four Italian cruisers. The battleship H.M.S. WARSPITE entered the fray and was soon trading salvos with the Italian capital ships at a range of 15 miles. A fifteen-inch shell from the WARSPITE scored a direct hit on the Italian flagship, GIULIO CESARE. This long-range hit proved to be too much for the Italians. Admiral Campioni withdrew his fleet behind a thick smokescreen.

The damage to the CESARE was not enough to sink her, but as Cunningham noted some time later, it was to have "a morale effect quite out of proportion to the damage."¹⁴ The British had effectively utilized land and sea based aircraft to observe and track the Italian fleet. The

14. Whipple, The Mediterranean, p. 53.

capabilities of airpower were soon to be even more vividly demonstrated, much to the Italian Navy's distress.

During the months following the action off Calabria, the British Mediterranean fleet received reinforcements in the form of two anti-aircraft cruisers, a battleship and the aircraft carrier ILLUSTRIOUS. Cunningham continued trying to accomplish his main objective of crippling the Italian Fleet. Italy's Naval Chief of Staff, Admiral Domenico Cavagnari, was proving to be most uncooperative in helping the British achieve their aim. The larger Italian ships generally stayed safely in port in compliance with the Chief of Staff's orders.

Cavagnari was well aware of the added flexibility the two aircraft carriers provided the British fleet. He was not about to allow his battleships to be caught at sea by English carrier-based torpedo planes. This attitude caused a great deal of dismay and resentment among his younger, more aggressive officers. Cavagnari's concern was well grounded as can be seen by the fate of the German battleship BISMARCK in May of 1941.

The absence of aircraft carriers caused no end of concern within the high command of Italy's Navy. The admirals had been repeatedly assured by Mussolini that the Regia Aeronautica would provide more than adequate reconnaissance and air support should the Navy become involved in an open-ocean battle. Despite the admirals' complaints, Mussolini

Mussolini maintained that: "Italy itself was a giant aircraft carrier, that the land-based bombers of the Italian Air Force could easily interdict an enemy's shipping anywhere in the central Mediterranean."¹⁵

In the case of Admiral Cunningham, the Italians were confronted with a leader who was gifted with a greater degree of innovation than their own. By the middle of October, 1940, the British Commander had formulated a daring plan of action. Since the Italian Fleet would not come out to fight, the Royal Navy would go in after them. This was to be achieved with the use of carrier-based aircraft.

The plan for a naval airstrike against Taranto had initially been developed in 1935 when Italy had invaded Ethiopia. The plan had been shelved when Britain decided against going to war over Italy's maneuvering in Africa. The aircraft to be used were the Fairey SWORDFISH torpedo planes. These machines were fabric covered biplanes with a top speed of just under 140 miles per hour. The British determined that if these squadrons were to have any reasonable chance of success, the attack would have to be carried out at night.

Cunningham originally intended to use both of his aircraft carriers on this strike. Unfortunately, one of

15. Ibid., p. 12

them had received such a battering over the previous few months that it had to be placed in the yards for extensive repairs. Some of this ship's aircraft were transferred to the other carrier. The attack had been planned for Trafalgar Day, October 21, but unforeseen mishaps delayed it until early November.

On the afternoon of November 11, 1940, aerial reconnaissance, provided by the RAF, determined that the large array of Italian warships in Taranto harbor included six battleships. These were to be the primary targets of the strike. At 8:10 on the same evening, twenty-one SWORDFISH departed from the carrier ILLUSTRIOUS enroute for the target, some 170 miles to the northeast. At approximately 11:00, the two waves of torpedo bombers commenced their attack. The harbor was defended by a formidable force of shore-based anti-aircraft batteries, a line of barrage balloons and a large number of guns on the anchored ships themselves. The duration of the strike was a little more than an hour. The British squadrons lost only two aircraft. Conversely, the Italian Navy suffered tremendous losses. Three battleships, two heavy cruisers and four destroyers were sunk or so badly damaged as to be placed out of action for many months to come. The remaining SWORDFISH returned safely to their carrier which the Regia Aeronautica had failed to locate.

A short time after the action, Admiral Emilio Mariano was quoted in a telephone conversation with Mussolini as

saying, "It's been a very hard night, Duce."¹⁶ The Italian Navy was significantly impressed by the nature and results of the strike. All major warships were ordered to safer harbors further up the coast of the mainland. So stationed, these vessels were too far north to be truly effective against the British convoys in the Mediterranean. This raid considerably reduced the morale of the Italian Navy while producing a corresponding rise in that of the Royal Navy.

Italy's military difficulties in North Africa and Greece brought about a large-scale German intervention in the Mediterranean. German aid to her faltering ally initially came in the form of Luftwaffe support. In late 1940, several Luftwaffe units were transferred to the area from other fronts. The most notable of these, Fliegerkorps X, was positioned in Sicily. This elite unit was specially trained to dive bomb ships.

From early 1941 on, the nature of the war in the Mediterranean would experience a significant shift. Sea power would become less of a factor as the importance of air power grew ever stronger. The British first experienced this phenomenon on January 10, 1941. The Luftwaffe made its presence felt in a strike on Cunningham's fleet. German

16. Ibid., p. 89-90.

JU-87 dive-bombers and twin-engined JU-88s attacked the British aircraft carrier ILLUSTRIOUS. The ILLUSTRIOUS was so severely damaged that she had to be sent to a shipyard in the United States for several months to effect repairs.¹⁷ The arrival of Fliegerkorps II, later in 1941, added further to the Royal Navy's problems of maintaining some adequate form of sea control. The battle for Crete, between April and June 1941, is a good example. The British suffered severe losses to land-based aircraft. Three cruisers and six destroyers were sunk. Two battleships, one aircraft carrier, two cruisers and two destroyers received heavy damage.¹⁸

Until the defeat of the Axis in North Africa, naval and merchant vessels from both sides made the passage, through the narrow Central Mediterranean, at extreme risk. Effective use of land based aircraft essentially drove the navies of all of the belligerents into assuming a strategically defensive role.

While the Italians suffered tragic losses due to conservative leadership, a lack of sea-based air power and just plain bad luck, they did achieve some stunning successes and a deserved fame in the area of special operations. The

17. Ibid., p. 103.

18. Ibid., p. 75.

experience gained from the wartime actions of the special assault units is still reflected in certain characteristics of Italy's present-day Navy.

The little-known but extremely effective special units would eventually sink or severely damage 86,000 tons of Allied warships and over 131,500 tons of enemy merchant shipping.¹⁹ This arm of the Navy was comprised of basically two kinds of assault teams. One consisted of high speed explosive-filled motorboats which were designed to ram and sink enemy vessels from the resultant explosion. The other teams utilized small, two-man torpedoes to place a large explosive charge under the hull of an intended victim. The device would then be detonated by a timing mechanism.

The special motorboat teams achieved their first success in March 1940, during an attack on British ships in Suda Bay, Crete. The cruiser, H.M.S. YORK was crippled and two tankers and a steamer were sunk. Another twenty ships would fall victim to these small, fast units before the end of the war. These boats came in a variety of sizes. The larger craft operated in flotillas that would perform night attacks against enemy merchant convoys. The boats would make a series of high speed runs against the selected convoy from both sides with often devastating results. The runs would

19. Ibid., p. 118.

continue until the boats ran out of torpedoes or were chased off by the convoy's naval escorts.

A more spectacular version was a small, one-man boat laden with explosives packed in its bow. The boat would speed towards its target, whereupon the single crewman would lock its rudder on course and then jump over the side in an effort to survive. The boat would then strike the hull of the target ship and sink. A pressure-sensitive detonator would set off the explosives which, in turn, ripped a sizeable underwater hole in the victim.

The second kind of unit was the two-man torpedo. These teams were formed into the 10th Light Flotilla. This flotilla wreaked havoc across the entire Mediterranean from Gibraltar to Alexandria. They accounted for two British battleships as well as over 100,000 tons of merchant shipping. The flotilla's most notable triumph occurred on the night of December 18, 1940. Six frogmen entered Alexandria harbor, utilizing two-man torpedoes, and succeeded in sinking the battleships VALIANT and QUEEN ELIZABETH. The actions of the 10th Flotilla caused a great deal of concern and even a certain amount of envy among the British. The exploits of the special assault units are a testimony to the skill, innovation and daring that form part of the heritage of the Italian Navy.

The Italian submarine force posed a continuing and serious threat to Allied shipping in the Mediterranean for

the better part of the war. Italy's submarines were most effective against convoys of merchantmen, but occasionally scored prominent successes against enemy warships. One such action occurred on the night of August 10, 1942, when the Italian submarine AXUM participated in an attack on a large British convoy in the vicinity of the Sicilian Narrows. The AXUM torpedoed and sank the cruiser NIGERIA before escaping unharmed. While the Italian submersibles enjoyed reasonable success, they simultaneously suffered serious losses due to enemy action and unfortunate accidents. By July 1944, the Navy had lost 84 of the original force of more than 100 vessels.²⁰ Wartime construction came nowhere close to replacing these losses. Italian merchant losses to enemy submarines were equally high.

Several key aspects of the Mediterranean conflict have left their imprint on the character of the Italian Navy. The flexibility afforded by carrier-based aviation, and its devastating effectiveness, was proved beyond a doubt in the Taranto raid. The submarine had once again displayed its lethal capabilities in scouting, interdiction and attack operations. The fact that large surface warships were often as much a liability as an asset, was made quite apparent to

20. Francis E. McMurtrie, ed., Jane's Fighting Ships 1943-44, New York: The MacMillan Co., 1945, p. 268.

the Italian leadership. The effectiveness of land-based aircraft, in an anti-shipping role, is an additional factor of great importance. The damage inflicted on the Royal Navy by the Luftwaffe and the Regia Aeronautica, despite the employment of several British aircraft carriers, provides a strong historical counter-argument against the Navy's current emphasis on the need for carrier-based aviation in the Mediterranean. All of these historical factors have had some degree of influence on the growth and development of the Navy. Often the extent of this influence has been tempered or enhanced by other factors which are financial or political in nature.

III. THE ITALIAN MILITARY ORDER OF BATTLE

It is necessary to have some understanding of the composition, character and current missions of the other major services (the Army and the Air Force) to more fully appreciate the capabilities and shortcomings of the Navy. This chapter will present the current force structure and deployment of all three services. The general character and mission of the Army and the Air Force will also be considered briefly. The Navy's role and the military factors influencing it, will be discussed in the following chapter.

The 80,000 man Carabinieri will not be addressed. This force is as well-disciplined and efficient as any of the regular military units, but is more correctly defined as a police organization with internal security and paramilitary overtones. The Carabinieri do have ties with the Ministry of Defense, but are generally associated with, and act as an element of, the Ministry of the Interior.

Italian men become eligible for military service when they have reached the age of 21. At the expiration of their required tours, conscripts enter the reserves. They remain on the reserve roles until age 45. The social character of the military, in general, is nicely summed up by Stefano Silvestri:

The military is still prevelantly drawn from the South and from agricultural regions, but there has also been a progressive rise in the recruits (and volunteers)

from the cities. The social background of the officers and their general level of culture is proportionally lower than the civilian community. The demand for technical services - scientific, technological, and industrial - is increasing, but the economic benefits offered by the armed forces are not comparable to those of the private sector.²¹

A. ARMY

The Italian Army has recently undergone considerable change, both in size and organization. The number of personnel has been consistently dropping over the past decade. In 1976, active duty soldiers numbered 306,500. Short-term conscripts accounted for approximately 83% of this figure.²² The total number of Army personnel had dropped to 258,000 by 1983. The present number of conscripts, about 187,000 amounted to roughly 72% of the entire force.²³ During the mid-1970's, the length of national service was reduced from 15 to 12 months. Supplementing the active army is a reserve force of 545,000 officers and enlisted personnel.

The 1970's witnessed a vigorous campaign to enhance the esprit of the troops through the adaption of Italy's colorful military traditions. Modern combat units are named

21. Stefano Silvestri, "The Italian Paradox: Consensus and Instability," The Internal Fabric of Western Security, London: Allenheld, Osmun & Co., 1981, p. 147.

22. E.K. Keefe, Area Handbook for Italy, Washington, D.C.: U.S. Government Printing Office, 1977, p. 239.

23. IISS, The Military Balance 1983-84, Cambridge: Heffers Printers Ltd., 1983, p. 36.

after, and continue in, the tradition of historically famous military organizations. Members of the Alpine brigades, noted for their mountaineer caps with a large black feather, are selected from the inhabitants of the country's mountainous regions. Their distinguished combat record and prompt assistance during national disasters have endeared them to the Italian public. The Bersaglieri are elite light infantry soldiers that form the bulk of the mechanized brigades in the armored division. The two amphibious battalions are better known as Lagunari, or Lagoon Infantry. Lagunari are recruited mainly from the inhabitants of the Adriatic coast near the mouth of the Po River. A large number of them were fishermen or had experience as game wardens. The Lagunari are not suited for true amphibious operations in the sense of marines or similar forces. They are specifically organized to operate under the conditions found in the lagoons, marshes and canals of the Northern Adriatic coastal region.²⁴

The Army provides an extensive educational system. The system includes the military academy at Modena for officer training, branch training schools for all arms, a mountain school, an amphibious school, and a light aviation school. Advanced education is provided at the School of Higher

24. Keefe, Area Handbook for Italy, pp. 239-240.

Military Studies in Rome and the War College at Civitavecchia. Schools providing literacy and general education courses are provided at the brigade level.²⁵

The army underwent a massive reorganization in 1978. Prior to 1978, Italian land forces consisted of two armored divisions, five infantry divisions, one airborne division, five Alpine brigades, three independent infantry brigades, one armored calvary brigade, and one amphibious (Lagunari) regiment. The divisions were organized in a rigid regimental structure with little internal flexibility. Most of these front line units were manned at approximately 50% of their planned strength.²⁶

The armored divisions were each comprised of one regiment of armored artillery (24 self-propelled guns), two regiments of armor (M-60A1 or Leopard I tanks), one mechanized infantry regiment, one armored reconnaissance battalion (55 M-47 MBT, 40 M-113 APC), one helicopter company, one maintenance/service unit, and one engineer battalion.

Each of the five infantry divisions was comprised of one artillery regiment, two motorized infantry regiments, one mechanized infantry regiment, one armored reconnaissance battalion, one helicopter company, one maintenance/service

25. Ibid., p. 241.

26. Antonio de Marchi, "Italian Defense in the 1980's: Part 2," Jane's Defense Review, Vo. 2, No. 4, 1981, p. 336.

unit, and one battalion of engineers. The following table provides a rough estimate of the equipment provided to each division:

Armored Division

330 - Leopard I MBT
560 - M-113 APC
6 - 8" SP Howitzers
72 - 155mm SPA

Infantry Division

110 - Leopard I or M-60A1 MBT
200 - M-113 APC
18 - 155mm Howitzers
36 - 105mm Howitzers
12 - 120mm Mortars

Sources: Antonio de Marchi, "Italian Defense in the 1980's" Part 2, p. 336; and DMS, Inc., Report on NATO Europe-Italy, 1983. p. 2.

The 1978 reorganization essentially reduced the number of understrength units and concentrated all available manpower and equipment into a smaller number of fully equipped, highly mobile brigades. A 1983 report, by DMS, Inc., stated that:

The bulk of the Italian Army is concentrated in 24 brigades, 18 of which are assigned to three Army Corps Commands and six assigned to regional military commands. Of the 24 brigades, five are armored, nine are mechanized, four are motorized, five are Alpine, and one is an airborne brigade. Twelve of the Brigades are concentrated into four divisions (one armored and three mechanized), each of which also includes an armored calvary group equipped with Leopards.

The six regional military commands are headquartered in Padua, Turin, Milan, Florence, Rome, Naples, and Palermo.

All three corps are located in Northern Italy and are assigned to NATO under COMLANDSOUTH whose headquarters are in Verona. The table below provides general information on unit composition and location.

V Corps

Ariete Armored Division (Pordenone)
Mantova Mechanized Infantry Division (Udine)
Folgore Mechanized Infantry Division (Treviso)
Serenissima Amphibious Troops Group (Venice)

VI Corps

Julia Alpine Brigade (Udine)
Cadore Alpine Brigade (Belluno)
Tridentina Alpine Brigade (Bressanone)
Orobica Alpine Brigade (Merano)
Taurinense Alpine Brigade (Turin)

III Corps

Centauro Mechanized Infantry Division (Novara)
Cremona Motorized Brigade (Turin)

Source: Antonio de Marchi, "Italian Defense in the 1980's: Part 2, Jane's Defense Review, Vo. 2, No. 4, 1981, p. 336.

The V Corps, headquartered at Vittorio Veneto, is the most important corps and is tasked with defending the "Gorizia Gap" on the border between Italy and Yugoslavia. In the event of war, its units would be the first to engage enemy forces advancing into the Po River Valley. The 4th Corps (Alpine Corps) is headquartered at Bolzano and is tasked with defending the Italian Alps. "The III Corps in Milan ensures the strength of the defense system, the security of the Po Valley and intervention against possible airborne landing in the rear."²⁷ All of the land forces are complemented by three Improved Hawk air-defense

27. Ibid., p. 336.

battalions (forty launchers) and nine light anti-aircraft battalions with 243 40mm towed guns.²⁸

The six independent brigades, not assigned to NATO, belong to the military regional commands. They are positioned as follows:

- Granatieri di Sardegna - Mechanized (Rome)
- Pinerolo - Mechanized (Bari)
- Folgore - Airborne (Pisa)
- Friuli - Motorized (Florence)
- Acqui - Motorized (L'Aquila)
- Aosta - Motorized (Messina)

The armored division consists of two armored brigades and one mechanized brigade. The three mechanized infantry divisions each have one armored brigade and two mechanized brigades. Support units are identical for both types of divisions: one cavalry battalion, two self-propelled artillery battalions, one engineer battalion, one logistic battalion, one medical battalion and one aviation detachment.²⁹

The table below provides statistics on divisional equipment for comparison with pre-1978 units:

28. IISS, The Military Balance 1983-84, p. 36.

29. de Marchi, "Italian Defense in the 1980's: Part 2," p. 336.

Armored Division

496 - Leopard I & M-60A1 MBT
113 - VCC-1 or M-113A1 APC
26 - 105mm SPA
18 - 155mm SPA
8 - 120mm Mortars

Mechanized Division

98 - Leopard I or M-60A1 MBT
260 - VCC-1 or M-113A1 APC
36 - 105mm SPA
18 - 155mm SPA
24 - 120mm Mortars

Sources: Antonio de Marchi, "Italian Defense in the 1980's: Part 2, p. 336; and DMS, Inc., Report on NATO Europe-Italy, 1983, p. 2.

The Aquileia missile brigade is a key army support unit. The Volturmo missile battalion (approximately 100 Lance missiles) is the core of the unit. The brigade also has four heavy artillery battalions. The primary mission of this unit is the long-range support of the V Corps. The Lance missiles comprise the entire nuclear fire capabilities of the Italian land forces. The ten-kiloton nuclear warheads are presently under U.S. control. The Amphibious Troops Group is equipped with M-113A1 APC's, LVTP-s amphibious vehicles and an assortment of LCM and LCVP landing craft for operations in its assigned environment.³⁰

The new Italian divisions possess a very high degree of flexibility in contrast to their pre-1978 counterparts. The divisions differ only in the number of armored and mechanized brigades under their control. The current brigade level organization permits a given division to command a variable number of brigades or to transition from a

30. Ibid., p. 336.

mechanized unit into a predominantly armored unit (or vice versa) as dictated by the fluid conditions expected to be encountered on the modern battlefield.

Refer to Figure 5 for the current deployment locations of the army's primary combat units.

B. AIR FORCE

In 1983, approximately forty percent of the Air Force's 70,600 men were conscripts serving twelve-month terms of active duty. The majority of Air Force officers receive their education at the Air College at Pozzuoli, just outside Naples. This facility combines scientific and technical training with a general education conducive to the development of future officers. Graduates receive commissions as either flying or engineering officers.³¹ An acute manpower shortage is a major problem for the Air Force. During the period of 1960 to 1980, the number of pilots and other flying personnel decreased from 2600 to 1500.³² Personnel are generally more skilled in technical fields than their contemporaries in the other services. Air Force air-traffic controllers handle all civilian and military

31. Keefe, Area Handbook for Italy, p. 247.

32. de Marchi, "Italian Defense in the 1980's: Part 2," p. 341.

FIGURE 5

LAND FORCES DEPLOYMENT



- Earmarked for NATO
- Regional Command Forces

aircraft in the airspace over Italy. Only 28,000 reserves are available to supplement the service in a time of crisis.

The Air Force currently has over 600 aircraft in operational service. This figure includes approximately 300 combat aircraft and 75 helicopters. The service is organized into 37 squadrons as follows: 6 fighter/ground attack squadrons; 1 light attack squadron; 3 light attack/reconnaissance squadrons; 6 interceptor squadrons; 2 reconnaissance squadrons; 2 maritime patrol squadrons; 1 ECM/reconnaissance squadron; 1 operational conversion unit; 3 transport squadrons; 4 communications squadrons; 1 search and rescue squadron; 1 combat training detachment; and 6 training squadrons. Eight surface-to-air missile groups (96 Nike Hercules launchers) provide general air defense protection.³³

The majority of the planes in the interceptor, ground attack and reconnaissance squadrons are aging F-104G/S and vintage Fiat G-91R/Y aircraft. One ground attack squadron (F-104G) has upgraded to Panavia TORNADO MRCA's; a second squadron (F-104S) is currently in the transition stage. The Air Force will ultimately receive 100 TORNADOS; 54 for three strike squadrons, 12 for training and 34 for attrition. An additional seven TORNADOS are assigned to the Italian combat

33. IISS, The Military Balance 1983-84, p. 37.

training detachment at Cottesmore, in the United Kingdom. These aircrafts, when fully operational, will greatly enhance the Air Force's ground support and deep-strike capabilities.³⁴

Most of the combat squadrons are concentrated in the northern part of the country under the control of the 5th Allied Tactical Air Force. Three interceptor squadrons, eight strike squadrons, and all of the Nike Hercules groups are in this command. Only three interceptor and two strike squadrons are stationed in central and southern Italy.³⁵ The uneven distribution of units is a direct result of Italy's past defense posture. This problem will be discussed in greater detail later in this study. A second, very serious problem confronting the Air Force is the totally inadequate air defense currently provided to the main airfields. This defense consists of .50 calibre machine guns and 40mm anti-aircraft guns. To partially rectify this deplorable situation, one Selenia Spada air-defense system is being formed and four more systems are being procured.³⁶ Spada is an all-weather, point defense missile system. The system is designed to defend

34. de Marchi, "Italian Defense in the 1980's: Part 2," p. 341.

35. Ibid., p. 341.

36. IISS, The Military Balance 1983-84, p. 37.

FIGURE 6

AIR FORCE BASES



- | | |
|--------------------|----------------|
| 1. Brindisi | 7. Ghedi |
| 2. Gioia Del Colla | 8. Villafranca |
| 3. Grosseto | 9. Verona |
| 4. Pisa | 10. Treviso |
| 5. Rimini | 11. Aviano |
| 6. Cameri | 12. Ribolto |

relatively small areas such as airports and factories. Spada employs moderately sophisticated detection and tracking radars in conjunction with the Aspide semi-active homing missile in six-cell launchers. The system's high mobility and short reaction time give it the capability of effectively countering low altitude air attacks.³⁷ The general distribution of the front-line combat squadrons is displayed in Figure 6.

C. NAVY

The Italian Navy is currently in the midst of a modernization program which is the result of legislation passed by the government in the mid-1970's. The completion of this evolution will provide a smaller, but significantly rejuvenated fleet. As a consequence of this fairly rapid transition, the number and type of combatants have noticeably changed from year to year. Italian naval combatants on active duty, as of mid-1983, included: 10 submarines, 1 light aircraft/helicopter carrier (with another under construction); 2 cruisers; 5 destroyers; 11 frigates; 8 corvettes; 7 hydrofoil guided-missile patrol boats; 4 fast attack craft; 2 landing ships; 50 landing craft; 24 minesweepers/minehunters; and a multitude of auxiliary and

37. Ronald R. Pretty, ed., Jane's Weapon Systems 1983-84, London: Jane's Publishing Co., Ltd., 1983, pp. 94-95.

support units. The following paragraphs deal with a general overview of the basic classes of ships employed in the fleet.³⁸ (See Figure 7.)

The submarine force, comprised of ten diesel-electric boats, is relatively small by international standards.³⁹ The two oldest units are ex-U.S. TANG class subs that were transferred to the Italian Navy in 1973-74. Both of these are more than 30 years old. They are due for decommissioning some time in 1983-1984. Four small TOTI class submarines entered service in 1968-69.⁴⁰ The employment of these rather modestly armed vessels is somewhat restricted due to their mediocre performance characteristics. It is of interest to note that this was the first class to be domestically constructed since the end of World War II. The four submarines of the SAURO class were commissioned between 1980 and 1982. These vessels are sixty feet longer and have nearly three times the tonnage of the TOTI class. The new submarines incorporate the latest design concepts (bronze-alloy propeller for silent running, fin-mounted diving

38. The basic characteristics of the primary combatants are listed in Appendix A.

39. Argentina and Brazil have the same number.

40. J.I. Couhat, ed., Combat Fleets of the World 1980/81, Annapolis, MD.: Naval Institute Press, 1980, p. 294.

FIGURE 7

NAVAL BASES



- | | |
|--------------|------------------|
| 1. La Spezia | 6. Naples |
| 2. Venice | 7. Augusta |
| 3. Ancona | 8. Messina |
| 4. Brindisi | 9. Cagliari |
| 5. Taranto | 10. La Maddalena |

planes and high capacity batteries).⁴¹ This class possesses much improved operating characteristics and forms the backbone of the submarine force.

The Italian Navy fought World War II without a single carrier, and paid a very high price for it. Since then, the Navy has shown a marked interest in shipboard aircraft with vertical takeoff and landing (V/STOL) characteristics. Until now, that has meant helicopters.⁴² The Italians currently have one "officially designated" light aircraft/helicopter carrier with a second one currently under construction.

The helicopter carrier on active duty is the guided-missile ASW cruiser, VITTORIO VENETO. This multi-mission capable ship was commissioned in 1969. The carrier designation apparently stems from the large landing deck and hangar facilities located on the aft section of the ship. The ship is armed with a variety of guided missiles, guns and ASW torpedo tubes. Nine AB-212 helicopters are provided for the vessel's airborne ASW operations. The VENETO is a moderately successful design and currently serves as the fleet flag ship.⁴³

41. Anthony Preston, Warships of the World, London: Jane's Publishing Co., 1980, p. 61.

42. Enzo Bonsignore, "Giuseppe Garibaldi: The Italian Navy's TDS," Proceedings, March 1981, p. 133.

43. Preston, Warships of the World, p. 93.

Italy's first "true" carrier was laid down in mid-1981. The GIUSEPPE GARIBALDI is technically classified as a through-deck cruiser. This design marked an important step towards the development of seaborne aviation capabilities for those countries which could ill-afford the tremendous cost involved in the construction of large, conventional aircraft carriers. The ship is relatively heavily armed with guided missiles, guns and torpedo tubes. The flight-deck and hangar facilities can handle 18 SH-3D helicopters. Accommodation for fixed-wing VSTOL aircraft (SEA HARRIERS?) has been incorporated into the initial construction plans. The ship has respectable operating characteristics and possesses a sophisticated array of electronic surveillance, tracking and fire-control systems.⁴⁴ The GARIBALDI is scheduled for commissioning sometime in 1985. The primary role of the GARIBALDI will most likely be that of a command and control ship for one of the Task Groups based in La Spezia or Taranto. The Fleet's ASW capabilities will be significantly enhanced by the addition of this new combatant.

The two ships of the ANDREA DORIA class of guided-missile cruisers round out the complement of the Navy's "large" surface combatants. Both vessels were commissioned

44. J. Moore, ed., Jane's Fighting Ships 1982-83, London: Jane's Publishing Co., 1982, p. 256.

in 1964. They are to be replaced (decommissioned) when the GARIBALDI enters service. (Mediocre anti-ship capabilities is one of the reasons.) These ships are equipped with surface-to-air guided missiles, several small-caliber guns and ASW torpedo tubes. Accommodations for four AB-212 helicopters are provided. This class was intended for use as escort cruisers. In reality, they are large missile-destroyers. The CAIO DIULIO was refitted as a midshipmen's training cruiser in 1979-80.

Italy has one destroyer and four guided-missile destroyers on active duty. The IMPETUOSO class, commissioned in 1958, was the Navy's first new destroyer since 1945. Their American armament consists of guns, torpedos and depth charges. The ships are no longer suited for front line service and are due to be replaced by an improved AUDACE class in the late 1980's.⁴⁵ The INDOMITO was placed in reserve status in 1981. Two large missile destroyers of the IMPAVIDO class were commissioned in 1963-64. Both ships underwent refitting during the period of 1974-1977. Current armament consists of surface-to-air missiles, guns and torpedo tubes. Most of these systems are American in origin. This design is basically an improved IMPETUOSO. The two newest guided missile destroyers, of the AUDACE

45. Preston, Warships of the World, p. 182.

class, entered the fleet in 1972-73. These fast, well-armed ships are basically an improvement of the IMPAVIDO design. Both have accommodations for two AB-212 helicopters. Two gas-turbine propelled ships of this class are to be built in the late 1980's.

The Navy currently has eleven frigates on active duty or under construction.⁴⁶ The BERGAMINI class, comprised of two ships, is more than 20 years old. Both vessels are armed with a variety of small caliber guns, torpedo tubes and depth charges. They are rapidly approaching an end to their active service life. The two ships of the ALPINO class, commissioned in 1968, are improved/combined versions of the CENTAURO and BERGAMINI classes. The improvements consist of more guns and two AB-212 helicopters. In 1970 the Italian Navy decided to embark on a new shipbuilding program, partly to replace elderly tonnage and partly to remedy the serious unemployment in the shipyards. The old Cantieri Del Tirreno yard at Riva Trigoso, near La Spezia, was modernized and redesigned for the mass production of frigates.⁴⁷ The design chosen was the LUPO class. The four Italian ships in this class were commissioned during the period of 1978-1980. These units, designed for convoy

46. Moore, Jane's Fighting Ships 1982-83, p. 262.

47. Preston, Warships of the World, p. 182.

escort duties, are updated versions of the ALPINO class. Their armament consists of guided missiles, guns and torpedo tubes. One AB-212 helicopter is carried on each ship. This class is named after the most famous Italian torpedo boat of World War II. In 1977, the Navy decided it needed a new class of fleet ASW escorts. It was therefore necessary to draft new staff requirements and design a new and different ship, which has now become known as the MAESTRALE (NW Wind, Mistral) class.⁴⁸ To date, three ships of this class have been completed. The last one (of 8 planned) is due for commissioning in late 1984. These fast, heavily-armed ships will be a welcome addition to NATO's Mediterranean forces.

The eight Corvettes, still in service, are divided into two classes. The four ships of the older ALBATROS class entered the fleet in 1955-56. They are small, slow and modestly armed with light guns and depth charges. The new DE CRISTOFARO class (commissioned in 1965-66) is an improved version of the ALBATROS. Armament consists of small caliber guns, depth charges and torpedo tubes. Both classes have been slated for retirement, but no official decision has yet been announced.⁴⁹

48. F.B. van Kuffeler, "The Italian 'Maestrale' Class Frigates," Jane's Defense Review, Vol. 2, No. 3., 1981, p. 268.

49. Moore, Jane's Fighting Ships 1982-83, p. 263.

The Italians have a reputation for inventiveness, innovation and a "pioneering spirit" in the shipbuilding field. This perception is supported by the SPARVIERO class hydrofoil-missile patrol boats. All seven vessels in this class have been commissioned. These high-speed (50 knots maximum) hydrofoils are armed with two surface-to-surface guided missiles and one automated gun. The prototype was studied by the Alinavi Society, which was formed by the Italian government and Boeing, U.S.A. in 1964. The project was based on the U.S. TUCUMCARI.⁵⁰

Four fast attack craft-convertible (LAMPO and FRECCIA classes) complete the list of primary combatants. The LAMPO and FRECCIA are fast, flexible vessels that can be used as gunboats, torpedo boats or minelayers.⁵¹

The mine countermeasure force consists of: four ex-U.S. AGGRESSIVE class ocean minesweepers; five ARAGOSTA class in-shore minesweepers; fourteen AGAVE class coastal minesweepers/mine-hunters; and one LERICI class minesweeper under construction (a total of ten are planned). Most of these vessels are of wooden-hulled construction and date back to the 1950's.

50. Couhat, Combat Fleets of the World 1980/81, p. 298.

51. Moore, Jane's Fighting Ships 1982-83, p. 266.

FIGURE 8

NAVAL AIR BASES



1. La Spezia: SH-3Ds
2. Catania: BR-1150s, AB-212s
3. Cagliari: BR-1150s
4. Taranto: AB-212s

The core of the amphibious forces are two old ex-U.S. DE SOTO COUNTY class LST's (built in the late 1950's) that were transferred to the Italian Navy in 1972. Total troop capacity, utilizing both ships, is approximately 1,150 men. Fifty assault-landing craft (ex-U.S. LCM and LCVF types) are employed with the two LST's.⁵²

The auxiliary and support forces consist of one ex-U.S. KENNETH WHITING class transport and approximately fifty to sixty tugboats of various sizes and capabilities. In addition to these, there are numerous salvage ships, lighthouse tenders, repair craft, harbor tankers, and coastal tankers. The Navy also has four sail-powered vessels (for midshipmen training) and three floating docks.

Italian Naval Aviation is relatively small in size when one considers the key role it plays in one of the Navy's primary missions (ASW operations). (See Figure 8.)

The Navy has operational control of two air force maritime patrol squadrons comprised of eighteen BR-1150 ATLANTICs. The squadrons are Number 86, which is stationed at Catania; and Number 88, stationed at Cagliari. Plans call for an additional eighteen aircraft to be added to the inventory. The French-built Breguet ATLANTICs were delivered to the Italians during the period of 1964-74.

52. Ibid., p. 267.

These twin-engine turbo-props have a maximum range of 5,600 miles and a maximum patrol endurance of eighteen hours. They carry a crew of twelve (plus a relief crew when on long patrols). Armament consists of bombs, U.S. or French depth charges, British torpedoes and four under-wing air-to-surface missiles.⁵³

These aircraft actually belong to the Italian Air Force (Aeronautica Militare). The Air Force is responsible for providing all of the required technical and logistic support, maintenance personnel, and the related infrastructure. Fifty percent of each aircrew are Air Force personnel while the remaining half are from the Italian Navy. The aircraft commander is always an Air Force officer and usually holds the U.S. equivalent rank of major or lieutenant-colonel. The aircraft tactical operations coordinator is a Naval officer. The composition of the remaining crew members (various missions specialists) is, more or less, equally divided between the two services.⁵⁴

The Navy, in the form of the Naval Staff, controls all of the training and operational aspects of the maritime squadrons. Conversely, administration, discipline and

53. J.W.R. Taylor, ed., Jane's All the World's Aircraft 1982-83, London: Jane's Publishing Co., 1982, p. 55.

54. Captain Marcello de Donno, Naval Attache - Italian Embassy, Washington, D.C., Interview of February 8, 1984.

personnel training are the responsibilities of the Aviation Inspectorate for the Navy (MARINAVIA). MARINAVIA forms a part of the Naval Staff, but an Air Force General is in charge of this group. The Inspectorate's personnel come from both services in roughly equal numbers.⁵⁵

The ATLANTIC squadrons are known as "Aviazione per la Marina." Literally translated, this means Aviation for the Navy. This unique organization came about as the result of government legislation in 1957. The intent was to create a viable anti-submarine capability without unduly disturbing the long-established boundaries of responsibility of the individual services. This unusual cooperative effort has received much criticism, but has proven to be an adequate response to the long-range maritime patrol requirements.

The Navy's goals, for the 1980's, call for a possible doubling in the size of this force. For the distant future, official planning seems oriented toward the replacement of the current BR-1150's with a new generation ATLANTIC. The Navy would like to have the new aircraft now, but the Air Force is responsible for providing funding for aircraft.⁵⁶ While of prime importance to the Navy, this program

55. Giovanni Sleiter, "Monitoring the Southern Flank," Interavia, January 1980, p. 42.

56. "The Italian Navy," Navy International, November, 1983, p. 654.

requirement is given very low priority within the Air Force, especially when considering the current need for new ground attack aircraft and the escalating costs of the TORNADO. The ATLANTICS will undergo a limited modernization involving an updating of avionics and electronic ASW systems. Funds for these improvements will be drawn from the Air Force budget.⁵⁷

This situation is an excellent example of one of the results of the interaction between several of the elements which influence the direction of growth within the armed forces. Historical, cultural and bureaucratic factors have all exerted themselves, to one degree or another, in effecting the present solution.

Helicopters are the workhorses of Italian Naval Aviation. Thirty SH-3D's (SEA KING) form the two ASW squadrons earmarked for the GARIBALDI. These aircraft are built by Augusta-Bell under license from the United States. They are used primarily in ASW/anti-surface-vessel missions. They are also capable of performing search and rescue evacuation and lift missions. In the latter, they can carry a maximum of thirty-one paratroops. The SEA KING has a normal crew of four, a maximum range of 360-700 miles (depending on the mission) and a maximum speed of 144 knots. Armament

57. de Donno, Interview of 8 February 1984.

includes four homing-torpedoes or depth charges, or four AS.12 anti-ship wire guided missiles, or two Sea Killer Mk.2 or Exocet AM-39/HARPOON types missiles. The SH-3D is a very effective platform when contrasted with other Italian models. An additional thirty SEA KINGS are planned for Catania, La Spezia and shipboard embarkation.⁵⁸ The SH-3D will eventually be replaced by the EH-101. This new helicopter is still in the design process and will be the product of a joint venture between the British Westland Company and Italy's Augusta Aircraft firm.⁵⁹

Fifty-three AB-212 helicopters are assigned to three shipborne squadrons. They are less capable than the SEA KING (roughly half the ordnance load), but are still much more effective than the earlier AB-204 model for independent operations. These aircraft can be used for stand-off missile guidance and mid-course passive guidance of ship-launched Otomat-2 surface-to-surface missiles.⁶⁰

The small marine force is equipped with thirty VCC-1's and ten LVTP-7's. The LVTP-7 is an American built armored amphibious assault vehicle. It carries a crew of seven and

58. Taylor, Jane's All the World's Aircraft 1982-83, p. 128.

59. de Donno, Interview of 8 February 1984.

60. Taylor, Jane's All the World's Aircraft 1982-83, p. 127.

a maximum of twenty-five troops. Armament consists of one .50 caliber machine gun (in a power turret) with 1,000 rounds of ammunition.⁶¹ The VCC-1 (CAMILLINO) is an improved version of the M113A1 APC. This infantry armored fighting vehicle has increased armor protection and provision for the infantry to fire its weapons from inside the hull. The CAMILLINO is domestically produced by Oto Melara.⁶² Infantry support weapons include sixteen 81mm mortars, eight 106mm recoilless rifles and six Milan wire-guided anti-tank missile systems.

In 1983, the Navy had 44,500 men on active duty. Approximately 11% (5,000) of the total are commissioned officers. Conscripts make up 60% of the Naval personnel. The remaining force are recruits and career NCOs. The required tour of service for conscripts has dropped in recent years from 24 to 18 months. The Italian Parliament is currently considering legislation which would reduce the draft to a period of twelve months as in the case of the Army and the Air Force. If the Bill is passed, the balance will shift percentages in favor of the volunteers. To aid the acclimation process, new recruits and conscripts tend to be selected from the inhabitants of coastal areas.

61. de Marchi, "Italian Defense in the 1980's: Part 2," p. 336.

62. Ibid., p. 337.

Included in the total personnel are 1,500 members of the Naval Air Arm and the 750-man San Marco Marine Battalion. The marine force has decreased in size over the past decade from regimental strength down to its current level. Naval reserves (total of 221,000) are subject to periodic recalls for brief periods of refresher training.⁶³

Training of personnel revolves around the Naval Academy, the Naval War College, a group of enlisted personnel schools, and the Fleet Operational Training Center.

Line officers are recruited from high school graduates each year. They attend the Naval Academy and are commissioned as ensigns upon completion of the four-year course there. After six years at sea, they return to the Naval Academy for post-graduate studies in one of the many specialized branches of the service (communications, gunnery, etc.). Each line officer attends the Naval Command School prior to being promoted to lieutenant commander. Senior officers are eligible to attend one of the various staff courses available at the Naval War College. Engineer and weapon officers follow a slightly different training pattern. They attend a two-year university course and

63. Keefe, Area Handbook for Italy, p. 247.

obtain a masters degree in engineering in lieu of returning to the Naval Academy for the post-graduate training.⁶⁴

Enlisted personnel are recruited from junior high schools while they are between the ages of 16 and 20. The Navy trains them at a group of schools located in La Maddalena and Taranto. The continuing instruction program is broken down into three main courses. All new personnel spend between one and two years in the basic course. Upon completion, they carry out their apprenticeship either at sea or at the training center. Petty Officers, Second Class, may attend the Integration Course after passing a battery of required examinations. An Improving Course is available for Petty Officers, First Class. This course enables individuals to complete and refine their training and education.⁶⁵

64. "The Italian Navy," Navy International, November, 1983, p. 658.

65. Ibid., p. 658.

IV. THE INFLUENCE OF NATO

For over three decades, since 1949, Italian defense policy has concentrated almost exclusively on Italy's NATO commitments. While this situation appears to be slowly changing, the characteristics and missions of all three services have been primarily influenced by their assigned roles within the force structure of NATO.

The Italian armed forces, earmarked for NATO, are assigned to the Allied Forces Southern Europe (AFSOUTH). The primary role of AFSOUTH is the protection of Mediterranean sea lanes of communication and the territorial defense of Greece, Italy and Turkey. Regional ground forces are further divided into LANDSOUTHEAST (covering Turkey) and LANDSOUTH (covering Italy). Naples serves as the base for the headquarters of AFSOUTH, AIRSOUTH, and NAVSOUTH. The headquarters for LANDSOUTH is located in Verona. LANDSOUTH is under Italian command while the others are commanded by Americans.

The bulk of Italy's ground and air forces are concentrated in the nation's industrial north. These units represent the sole ground link between the Central and Southern NATO Regions. Their main mission is the defense of the Po River Valley (Italian northern plain) from an eastern-oriented threat. The weak point in this northern defense is

the "Gorizia gap." This gap is a "flat passage between Yugoslavia and Italy, 60 kilometers wide and 150 kilometers long, through which the armored forces of the Warsaw Pact could reach the Po Valley."⁶⁶

Italy's key neighbors in this region, Austria and Yugoslavia, are both neutral and non-aligned. Hungary, the nearest WTO member, is roughly 180 miles away. Warsaw Pact forces, originating in Hungary, would have to overcome relatively stiff Yugoslav resistance prior to reaching the Italian frontier. On the other hand, Austria is incapable of more than nominal resistance to the Warsaw Pact, owing in part to the restrictions on armament in the Austrian State Treaty. Occupation of the northern plain would result in effectively cutting off Italy from the rest of NATO. This would, in turn, permit an effective "surrounding maneuver" to be initiated against the southern forces of NATO's Central Front. The size of the northern plain, over 200 miles across, makes it an excellent area for airborne operations. The ready availability of suitable air bases would permit hostile forces to launch nuclear strikes (aircraft and missile) against the NATO Central Front forces.⁶⁷ (NATO's air defenses are inadequate, while

66. de Marchi, "Italian Defense in the 1980's: Part 2," p. 335.

67. Refer to Map III.

NATO has no defense at all against Soviet ballistic missiles.)

To more fully appreciate the influence NATO has had on the current organization and proposed missions of the Italian Navy, one must consider some key elements associated with the West's perceptions of the strategic political and threat (in this case, the military forces of the Soviet Union), and the geographical parameters of the Italian Navy's planned theater of operations. These elements help determine the Navy's following wartime missions:

1. Protection of NATO shipping including reinforcement and logistics-related traffic.
2. Provide escort for, and support of, Allied task forces and battle groups.
3. Maintain the integrity of contiguous coastal waters.
4. Provide a maritime defense of the national territory.

The last two missions have an equal importance within Italy's national defense policies outside the purview of NATO. In addition to the above-stated missions, the Navy must maintain a credible peacetime presence to aid in maintaining an acceptable degree of stability in the Mediterranean Basin.

A. THE OPERATIONAL THEATER

Italy's strategic location, in the center of the Mediterranean, essentially divides the sea into an eastern

and a western basin. The country's geographical characteristics pose a peculiar and somewhat formidable challenge to the Italian Navy. The islands of Sicily and Sardinia, in conjunction with the mainland, present a total of almost 4,000 miles of coastline bordered by four seas. The Navy is obliged to operate over three major ocean areas in the performance of its duties. To the west of Italy is the area comprised of the Ionian and Tyrrhenian seas. This sector encompasses the major sea lines of communication that would be used as the primary supply route to the Italian mainland in the event of large-scale hostilities. It must be remembered that approximately ninety percent of Italy's annual imports arrive by sea. This amounts to roughly 250 million tons of commodities. The fact that fifty percent of this figure is oil is significant when the nation's lack of energy resources is considered. In a time of crisis, the Navy would be deeply involved in security and escort duties within this operational area. These duties would eventually include responsibility for full convoy operations of both supplies and reinforcements for NATO's southern flank.

The second area of operations would be the Sicilian Narrows. The waters between Sicily and Tunisia, on the North African coast, form a critical choke point. Passage would have to be denied to Soviet forces attempting to break out into the Western Mediterranean. Conversely, the Narrows would have to be kept clear of hostile vessels attempting to

interdict ships carrying supplies and reinforcements to Greece and Turkey in the Eastern Mediterranean.

The third operating area is the Adriatic Sea which borders the eastern coast of Italy. As was noted from the events of the First World War, this area has peculiar geographical characteristics which do not favor Italian forces attempting to perform an effective defense.

The topography of the Adriatic has changed very little since World War I. Italy's long, exposed coastline still provides little in the way of natural protection. The width of the sea itself, provides further problems. The rugged western coasts of Yugoslavia and Albania are but a few hours steaming time to the east. The narrow waters are even less an obstacle to hostile aircraft.

Despite the difficulties presented, plans have been formulated for providing a modest defense of the Adriatic. These plans are based on the extensive use of mines, coastal radar, aircraft and fast-attack craft. The effectiveness of this defense scheme is questionable. The Navy's current mine-warfare fleet is inadequate to meet the demands that would most likely be placed on it in the event of a major war. A large number of the aircraft utilized would probably be helicopters armed with anti-ship missiles. These could be quite useful against surface targets but their effect would be negligible against enemy submarines and fixed-wing aircraft.

Should Yugoslavia side with, or be conquered by, the Soviet Union, the most probable threat would be in the form of night attacks from missile-armed fast attack craft operating out of the numerous islands off the Adriatic's east coast. This form of attack has definite advantages for the aggressor. Ships of the Italian defense force would be silhouetted against the flat shoreline to the west (both visually and on radar), whereas the attackers would be masked by the rugged eastern coast and the multitude of islands. A reasonable defense of the Adriatic would only be possible with a very quick reaction time coupled with a very efficient, high-speed communications system. The Italians are working on this problem, but still have much to do.

B. THE THREAT

Soviet penetration in the Mediterranean is considered to be the overriding regional threat by NATO. The West is extremely sensitive to the effects of this penetration on the delicate, often precarious, balance of power in the region.

A strong Soviet presence in the Mediterranean is a relatively recent phenomenon. Soviet naval forces made their first major deployment to the area in 1958. A number of submarines and intelligence gathering ships began regular patrols from a base in Albania. This action was apparently in response to the American deployment of long-range

nuclear-capable carrier aircraft to the Sixth Fleet.⁶⁸ These aircraft had a limited capability for reaching targets within the Soviet Union. Between 1961 and 1964, Soviet naval activity became rather intermittent due to the loss of the Albanian port facilities which resulted from the break between Albania and the U.S.S.R. The Montreux Convention prevented the transit of submarines from the Black Sea (except those enroute to shipyards outside of the Black Sea). Therefore, those submarines in evidence during that period had to make a long and arduous voyage from Northern or Battle Fleet bases. The introduction of American Polaris submarines into the Mediterranean in 1963 led to a substantial increase in the Soviet presence over the next four years.⁶⁹

The Soviet Navy's Fifth Eskadra is the main threat to Western maritime interests in the Mediterranean. On any given day, the average number of ships in this command is approximately forty-five. This number has remained fairly constant since the early 1970's when the Soviets apparently reached the deployment levels they deemed appropriate for the support of their international policies in the region.

68. Jesse W. Lewis, Jr., The Strategic Balance in the Mediterranean, Washington, D.C.: American Enterprises Institute for Public Policy Research, 1976, p. 57.

69. Ibid., p. 59.

Various reliable sources provide slightly differing figures as to the general composition of the Fifth Eskadra. The following list is an adequate representation of these numbers:

8-10	Torpedo attack submarines
2-4	Cruisers, some or all armed with guided missiles
2-3	Cruise Missile attack submarines
9-12	Destroyers, some armed with guided missiles
1-3	Minesweepers
1-3	Amphibious ships
15-20	Auxiliary ships
5-6	Survey, research and intelligence gathering ships

It is widely believed that the torpedo attack submarines would be utilized to remove American ballistic missile submarines while the remaining combatants would present a formidable threat to allied merchant shipping and naval vessels. The Soviet Fifth Eskadra represents a potent sea denial force in the eastern portion of the region. This force is still somewhat limited by an inadequate number of shore-based logistic facilities.

The Soviets are continually striving to improve their present shortcomings in this area. Varying degrees of success have resulted over the past twenty years. Currently they have several modest facilities located in the Eastern Basin and in the Adriatic. These include limited support

70. Director of Naval Intelligence, Understanding Soviet Naval Developments, Washington, D.C.: U.S. Government Printing Office, 1981, p. 17.

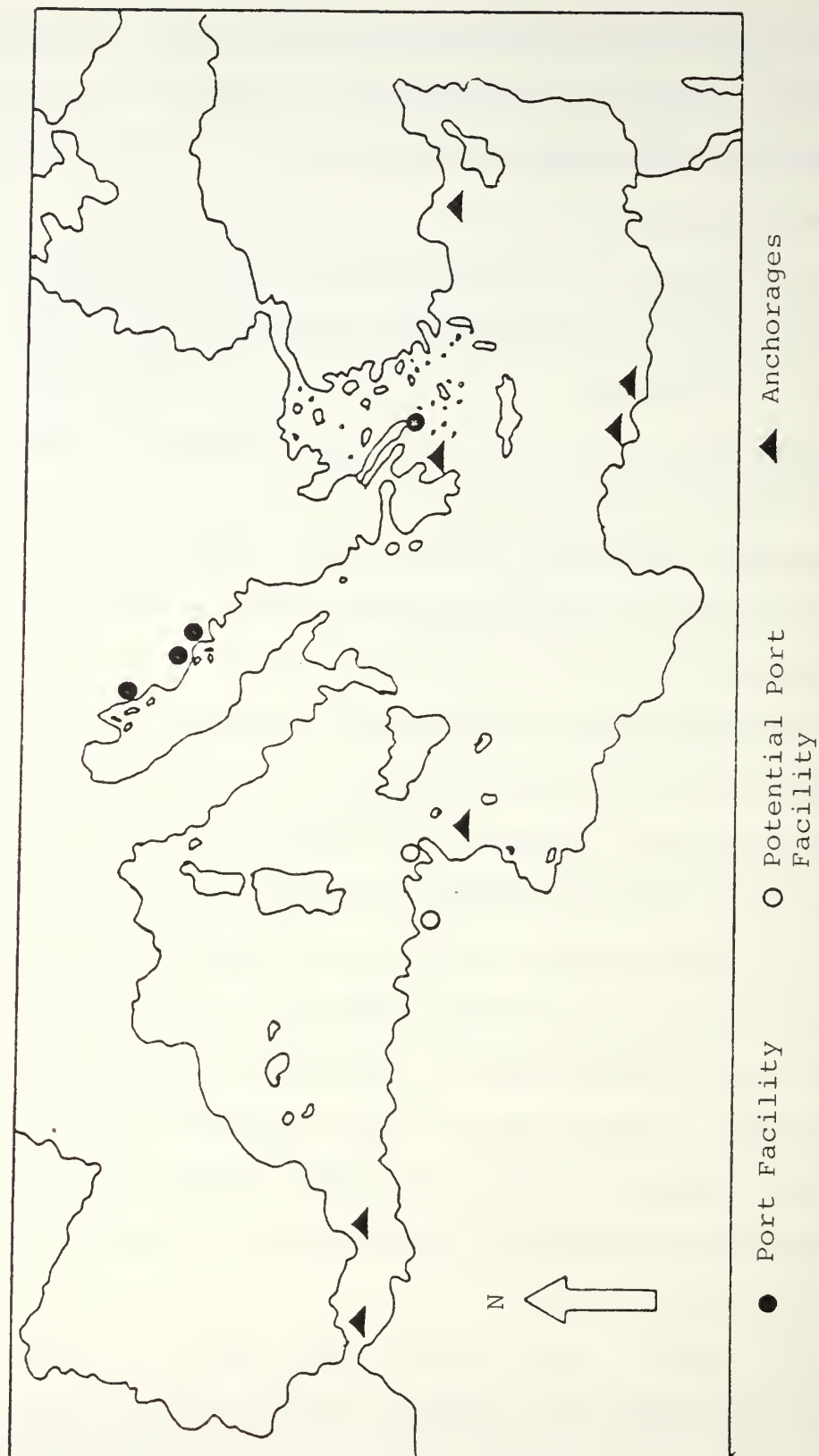
bases for Soviet naval combatants at Trivat, Yugoslavia and Tartuous, Syria. Maintenance and repair facilities, for auxiliaries and other non-combatants, are available at the Yugoslavian ports of Trogir and Bjela as well as the Greek port of Syros. Continued cultivation of their relations with Algeria and Tunisia have resulted in the potential for use of similar facilities in Annaba and Biserta respectively. The loss of access to Egyptian bases in 1972 was a severe setback to Soviet deployment of reconnaissance and strike aircraft. The recent periodic stationing of aircraft in Libya may indicate a forthcoming change in this situation.

To compensate for the lack of access to regular ports, the Soviets have made extensive use of the multitude of shoals located throughout the Mediterranean. These relatively shallow areas enable the ships to anchor for periods of crew rest and for refueling and replenishment. There are currently between six and twelve such areas in fairly constant use. (See Figure 9) These anchorages only partially compensate for the lack of more permanent bases. The best of them become untenable in storm conditions, and vessels anchored in them would be extremely vulnerable to attack from hostile forces.

In summary, the Italian Navy and its allies, face a potential enemy force which is approximately half the size of the Italian fleet in the number of combatants and is

FIGURE 9

SOVIET ANCHORAGES AND FACILITIES IN THE MEDITERRANEAN



forced to operate off a limited logistical system. Unfortunately, this force is augmented by Soviet naval aviation units operating out of bases in the Crimea. They amount to roughly 100 high performance bombers armed with sophisticated air-to-surface missiles. The range of these aircraft would enable them to operate quite easily over the Ionian and Adriatic seas. Possible forward deployment to certain North African bases would provide them with the potential for striking targets almost anywhere in the Eastern or Central Mediterranean. The 100-150 mile range of their air-borne anti-ship weapons make these aircraft an even more lethal hazard to Italian naval operations. Once again, the Italians have had historical experience in this area. On September 9, 1943, the 35,000 ton battleship ROMA was struck by a glider-bomb launched from a German long-range bomber. The ship sank shortly afterwards near the Strait of Bonafacio.⁷¹ Employment of KIEV-class guided missile VSTOL aircraft carriers has further aggravated existing problems. These ships, with their complement of YAK-36 FORGER fighter-bombers, have given the Soviets an added flexibility which the Italians still lack.

The nature of this potent enemy has certainly influenced the missions both of NATO, and Italy in particular, in the

71. Francis E. McMurtrie, ed., Jane's Fighting Ships 1944-45, New York: The MacMillan Company, 1947, p. 614.

Mediterranean Theater of operations. The strength of the Soviet submarine and naval air units has been especially significant.

C. THE MAIN TASKS OF THE ITALIAN NAVY

The first and foremost task of the Italian Navy is to gain and maintain control of the three ocean areas mentioned previously in this chapter. When the nature of the threat is considered, it becomes quite apparent that the primary role of the Navy will be the conduct of aggressive ASW operations. Italy's fleet must be able to confront and successfully dispose of any Soviet submarine forces operating in these areas.

The two Task Groups stationed at La Spezia and Taranto are intended to be utilized initially to block, and eventually reduce, the enemy submarine threat. Probably all of the major surface units will be employed to form the bulk of these two ASW groups. Before they can perform sea control operations and establish a viable SLOC defense, they will have to survive the initial phase of the war which is generally assumed to entail a surprise pre-emptive strike by enemy forces. The best chance for success in this would probably lie in early evasion of such a strike (what you can't find, you can't attack). This would, of course, require some degree of foresight in conjunction with a modicum of warning.

The small size of the Italian Fleet would necessitate a serious effort to achieve as low a rate of attrition as possible. This could probably be achieved in the Western Mediterranean, but would be substantially more difficult in waters east of Italy. The Soviets' predilection for concentrating their forces in the Eastern Basin would make any foray into that area a hazardous proposition at best.

Providing an adequate amount of air defense is a task that is directly related with the Navy's sea-control mission and is only slightly less important than the consideration given to ASW operations. The surface combatants are capable of providing medium and short range defense, but the long reach of some Soviet anti-ship missiles brings forth a requirement for some form of fixed-wing aircraft defense. The British experience in the Falkland Islands conflict graphically illustrated this point. The current mission and deployment scheme of the Italian Air Force is such that the Navy can expect little in the way of effective and dependable air support. This holds especially true for any operation undertaken in the eastern half of the Mediterranean.

The task of safeguarding the transit of merchant shipping and Allied battle groups involves different, but related, operations. The Navy will have to conduct convoy protection, mine countermeasure operations and sea denial to adequately satisfy the mission.

One of the key elements in sea lines of communication protection will involve the control of the major chokepoints in the Central Mediterranean. These chokepoints are located on either side of the Sicilian Channel, the area north of Sardinia and in the Straits of Otranto. Control of the Sicilian Channel is of vital importance to both NATO and the Soviets. NATO command of this area would essentially bottle up the Fifth Eskadra in the eastern half of the Mediterranean. If such were the case, the resulting situation would provide NATO with several advantages: Italy would be reasonably assured of a continuous supply and communications link with the west; Allied naval and merchant vessels would be able to move at will in the Western Basin; combatants normally needed for sea-control and escort duties in the western sector could be redeployed to forces in the eastern sector; and the task of locating and neutralizing the enemy fleet would be made that much less difficult.

To accomplish the task of controlling the chokepoints, the Italian Navy has planned to utilize its fast attack craft several shore-based helicopters armed with anti-ship missiles and missile-armed hydrofoils.⁷² The maneuverability and shallow operating draft of these vessels make them ideally suited for just such an operation. Plans also

72. de Donno, Interview of 8 February, 1984.

exist for the conduct of barrier-type operations which would employ submarines and wherever possible, minefields.

The presence of, and coordination with, other allied forces is an important consideration. Indeed, support and escort operations for battle groups of the American Sixth Fleet is another of the Italian Navy's missions. The possible redeployment of elements of the Sixth Fleet to areas of operation outside the Mediterranean could place a serious strain on the Italian Navy in a time of crisis. The availability of French and Spanish naval forces is questionable and would depend somewhat upon the nature of the conflict and the state of affairs outside the immediate theater of operation.

All of the above factors have played a part in determining the current force structure of the Italian Navy. The basic characteristics of Italy's primary naval combatants are, in part, a reflection of the influence these factors have had on the development of the present strategy and organizational trends of the Navy. (See Appendix A.)

The Navy is relatively small by conventional standards. Its total tonnage is slightly greater than 100,000 tons.⁷³ What it lacks in size, it partially makes up for in versatility. All of the major combatants possess a fairly

73. de Marchi, "Italian Defense in the 1980's: Part 2," p. 335.

impressive array of armaments. Most of the modern vessels are multi-mission capable in all three of the battle environments. Many have modern surface-to-surface and surface-to-air missile systems. All have extensive ASW detection and weapon systems. These ships are quite capable of performing sea-control and SLOC protection missions. Their most significant short-coming is in the area of adequate long-range air defense. This is a serious problem now, and will become more so as anti-ship weapon system technology continues to improve.

The components of the coastal force are generally well suited for their assigned missions. The conventional fast attack craft are being replaced by the missile armed hydrofoils which have prove to be extremely effective in shallow water operations. The primary deficiency of this force is its woefully inadequate size. Italy currently has only seven operational hydrofoils of the SPARVIERO class. No more are scheduled for construction until operational testing and evaluation on the existing units is completed.⁷⁴

The Navy's mine warfare force has been reduced by almost a third in the past few years due to the forced decommissioning of several obsolete units. The effectiveness of this force will be greatly enhanced by the addition of the

74. de Donno, Interview of 8 February, 1984.

new LERICI class minehunters. Four such units are now under construction and construction of another six is projected for later in this decade.

The submarine force is modern by contemporary standards. It is, as was mentioned in the preceding chapter, very small in size. Current plans call for a total fleet of twelve submarines with no immediate plans for a further increase in size.⁷⁵ On the positive side, half of the total force will consist of the SAURO class which does employ the latest in structural design technology.

An additional factor, not previously addressed, bears some consideration. The Italians have experienced a growing awareness for the potential development of national crises outside the purview of NATO. Italy is geographically located in the center of a region that is undergoing considerable political upheaval. "At present, all Mediterranean countries are increasing their military power either to exert pressure on bordering states or to protect themselves from such pressures."⁷⁶ The Italians have a multitude of interests within the region that promote a strong desire for achieving and maintaining some form of geopolitical stability. As a consequence, Italy has recently begun to

75. Ibid.

76. Luigi Caligaris, "Italian Defense Policy: Problems and Prospects," Survival, Vol. 23, 1983. p. 71.

take a more active and less dependent role in the Mediterranean.

One example of this is Italy's relations with Malta. Malta's troubles began with "the Libyan demand in 1980 that Malta cease oil exploration in disputed waters. [This demand] was backed by the threatening appearance of a submarine close to Malta's oil platform. As a result, Malta abandoned the operation."⁷⁷ On 15 September 1981, Italy and Malta signed a neutrality Agreement. (See Appendix B.) Under the terms of the agreement, Italy guaranteed Malta's neutrality. Malta, in turn, is committed to preventing Soviet use of the ex-British naval base at Valetta.⁷⁸ In signing the Agreement, Malta benefits from Italian protection against overt acts of aggression by Libya. The Italians (and NATO) gain the very important strategic advantage of preventing the Soviets from acquiring port facilities in the middle of the Mediterranean. This has not been achieved without cost to the Italians. They have risked disrupting relatively favorable relations with Libya. Consideration must be given to the fact that Libya is a major source for Italian oil imports as well as a sizeable customer for Italy's manufactured goods (including armaments).

77. Ibid., p. 71.

78. Robert Harvey, "A Kind of Stability," The Economist, July 23, 1983, p. 27.

The Navy is well-trained, well-disciplined and adequately staffed in relation to its other NATO counterparts. The two most pressing problems confronting the Navy today are lack of an adequate number of vessels in all key operational areas and the loss of a certain degree of flexibility due to the lack of viable tactical air support. These problems are sustained by several factors which are outside of the purview of the military and will be addressed in the following chapters.

V. THE INFLUENCE OF THE ECONOMY AND DOMESTIC POLICIES

Governmental policy decisions have an impact on the entire spectrum of Italian social and administrative institutions. Conversely, these same institutions exert a varying amount of influence on, and ultimately help determine, the actual nature and composition of the nation's foreign and domestic policies. While Italy is not a unique case in regard to this phenomenon, certain peculiar aspects of the Italian culture and political system must be considered prior to evaluating the effects this process has on the role and resulting attitudes of the three armed services. These aspects are the cultural heritage of the people and the structure and function of the government. The interaction and polarization of these elements is dictated, to a great extent, by the prevailing economic conditions. This, in turn, exerts considerable influence on the options and actions of the armed services.

A. CULTURAL HERITAGE

A brief description of the social and political attitudes of the general populace is a prerequisite to any discussion on national politics. Italy is fundamentally a society of villages and towns. This holds true for both the industrialized north and much poorer, rural south. Even the

majority of families populating the urban areas are removed by only a couple of generations from the rural environment.

Social life in Italy revolves around the family. The intense personal devotion to the immediate family, by all members, is based on a heritage derived from the nation's turbulent history. The full ramifications of this predominant social institution were presented, twenty years ago, by Luigi Barzini:

The first source of power is the family. The Italian family is a stronghold in a hostile land: within its walls and among its members, the individual finds consolation, help, advice, provisions, loans, weapons, allies and accomplices to aid him in his pursuits. No Italian who has a family is ever alone. He finds in it a refuge in which to lick his wounds after a defeat, or an arsenal and a staff for victory.⁷⁹

The individual's primary motivation is to optimize the short-term material advantage of the family. For most Italians, the successful accomplishment of this task takes precedence over everything else. In pursuit of this goal, one assumes that all others will be doing likewise. As a result of this, the individual perceives all those outside the immediate family as potential competitors and therefore as potential enemies. A natural progression from this is that nearly all facets of daily life tend to be viewed with a high degree of suspicion.

79. Luigi Barzini, The Italians, London: Hamish Hamilton, Ltd., 1964, p. 190.

A second important theme in Italian society is described by sociologist Edwin C. Banfield as that of "cutting a good figure - una bella figura."⁸⁰ The desire to gain respect and admiration and to avoid cutting a bad figure (una brutta figura) is especially intense in all aspects of Italian society. The people are, to a large degree, preoccupied with authority, respect for hierarchy, titles and influence. They are impressed by power and material possessions. A combination of these factors leads to a general condition of submissiveness to, and cultivation of, those in a position to help or hurt one. Incessant use of political leverage is a natural by-product of this environment.

The political attitudes and behavior of the general populace are derived from the social foundation described above. Banfield presents a series of propositions, based on theory and actual observation of behavior, concerning the population's attitude toward politics:⁸¹

1. Material gain, in the short run, will be the only motive for concern with public affairs.
2. Public affairs are for officials, not for private citizens.
3. Whatever group is in power is assumed to be self-serving and corrupt.

80. Norman Kogan, The Politics of Italian Foreign Policy, New York: Frederick A. Praeger, Inc., 1963, p. 4.

81. Ibid., p. 7.

4. There is no connection between abstract principle (ideology) and everyday behavior.
5. A claim to be inspired by public welfare rather than private advantage is regarded as fraudulent.
6. Officeholders and professional people regard their positions as weapons to be used for private advantage.

These prepositions generate a concept of strong public bias. It is taken for granted that political decisions are rarely made on the merits of the issues involved, but depend more on the expected material gain and enhanced personal power of those who make the decisions. Emphasis on personal gain deeply undermines any potential bonds of social solidarity.

The apparent indifference of the majority of the population toward the broader national issues is much more pronounced on the level of international affairs. The fairly strong sense of Italian nationalism cannot hope to compete with the deeply-rooted sentiments surrounding the nucleus of the family. Spectacular events such as the Berlin Crisis, or mankind's achievements in space will momentarily capture the attention of the individual. But this phenomenon is of brief duration and is quickly submerged in the unending struggle for personal survival.

A reasonable understanding of the underlying social structure and the political motivations of Italian people is of paramount importance. Broad public opinion is nebulous and has seemingly little direct influence on governmental

policy. But, it must also be understood that no modern government can achieve effective foreign and domestic policies without support of the masses. With this thought in mind, the key elements that comprise and influence Italy's rather complex political system can now be considered.

B. THE POLITICAL SYSTEM

1. General Characteristics of the Political Parties

The major political parties are, beyond a doubt, the undisputed source of power within the Italian political system. The total number of political organizations is quite large, but only a small portion of them have the necessary strength to exert their influence in the governmental area.

The following is a list of the most noteworthy parties:

- Christian Democratic Party (DC)
- Italian Communist Party (PCI)
- Italian Socialist Party (PSI)
- Italian Social Democratic Party (PSDI)
- Italian Liberal Party (PLI)
- Italian Social Movement (MSI)
- Republican Party (PRI)

Most of the actual power rests firmly with the first three parties, but the Italian propensity for forming coalitions results in situations where even the smaller organizations can wield an influence out of proportion to their size.

Control of the big parties lies within a cadre of officials at the head of the party hierarchy. These groups are known as the executive bureaus (direzione). In most

parties, the executive bureau is elected by the party central committee (referred to in some cases as the national council). The central committees, in turn, are elected by the individual party congresses.⁸² Within a given party, the executive bureau generally holds tight rein over the central committee and the party congress. The executives accomplish this through their representative secretaries in the regional, provincial and local organizations. Delegates to the party congress are elected through local section meetings and the provincial congresses. The secretaries ensure that "appropriate" candidates are nominated and elected.⁸³

The problem of factionalism is most severe in the Christian Democratic and Socialist parties. The Communist Party experiences the least amount of difficulty in this area. With the exception of the PCI, the practice in the major parties is to have a representative of each faction on the executive bureau. Policy issues are, therefore, generally developed and decided on at the top. The local party officials follow and support the policies of one of the faction leaders. As a result of this, the lower level party bureaucrats have little impact in deciding their ultimate

82. Ibid., p. 47.

83. Ibid.

position on a given issue. The upper echelon officials control the candidacies for public office. The central committee (controlled by the executive bureau) can reject any candidate for Parliament who has been nominated by the lower level party organization. The hierarchy maintains control over its deputies and senators through its capability to prevent an individual's renomination or by shifting his candidacy to a district where he is sure to lose. Parliamentarians are eligible for a pension upon successful completion of more than six years service. Unfortunately for them, elections are required every five years at a minimum. The pension is fairly substantial by national standards and so most members of Parliament are eager to be re-elected. To do so, the respective deputy or senator must ensure that he does nothing to displease his party leaders. This system is collectively known as the partitocrazia.⁸⁴

In essence, the system effectively emasculates the Parliament and the Cabinet. Parliamentarians vote en bloc and steadfastly adhere to their party's current position on any given issue. Consequently, there is little constitutionalism in evidence in Italy today. This is not meant to imply that breaches in discipline never occur. The rare occasions when such an event does take place are worthy of

84. Ibid., p. 48

nationwide coverage by the news media. The penalties imposed on the offender by the party are severe. The central committee will denounce him at the very least. The more common punishment is expulsion from the party. In Italy, very few independents win elections without the backing of an organized party.

2. Governmental Structure

The Italian Parliament is divided into two houses: The Chamber of Deputies and the Senate. Both of these august bodies are considered to have equal legal powers under the constitution. In actual practice, the Chamber of Deputies apparently has more influence as the preponderance of party leaders can be found within this house.

A hostile critic once divided the parliamentarians into four groups:⁸⁵

1. Ministers or potential ministers: members for whom getting into or staying in the Cabinet is everything. Every question is resolved according to the anticipated effect on the individual's career.
2. The "court": other members of the Parliament whose fortunes are tied to the fortunes of a potential minister.
3. The organization men: members of the apparatus of the party, or the union, or a pressure group. Their personal influence depends on their organization's power, which will draw a group of clients to them. They want to develop their organization and their position in it.

85. Ibid., p. 65.

4. The others: members without any particular abilities, who must please their superiors in order to get re-nominated. But they try not to get identified with a particular current within the party so as to avoid sharing any possible failures.

This is a somewhat arbitrary breakdown and cannot be applied equally to all parties. This factionalism does not apply much to the smaller parties, and of the three larger parties (DC, PCI, PSI), it is most accurate in the case of the Christian Democrats. This is a natural conclusion when the rather loose organization and large size (biggest of the current political parties) of the DC are considered.

The Italian Parliament has not achieved much prestige over the years. This is not very surprising since there is little to recommend it, apart from the obvious personal benefits it offers to its members.

The Cabinet consists of the heads of a variety of ministries: foreign affairs, industry, finance, treasury, etc. The Prime Minister is the head of the Cabinet and acts to coordinate and guide its activities. The function and power of the individual ministers varies according to the strengths and weaknesses of each man. The Cabinet does not appear to be very effective when it operates as a collective decision-making body.⁸⁶

86. Ibid., p. 67.

The role of a given Prime Minister depends to a great extent upon his skill, political position and his personal interests. A weak man may hesitate to interfere with those ministers who are perceived as being more politically powerful than himself. Conversely, a strong Prime Minister can greatly influence the activities of several of his subordinates within the Cabinet.

Only high-level policy issues are brought before the Cabinet for discussion and resolution. The fact that all of the ministers are also high party officials must be taken into account. As with the Parliament, the fate of most issues has already been decided in the party executive bureaus. This applies to both one-party and coalition governments. So, in effect, the Cabinet of Ministers is really just one more tool of the major parties.

The Constitution of the Italian Republic established a parliamentary form of government with the President designated as the head of state. The President's powers and functions are described in Chapter II of the Constitution. Of primary importance is his power to promulgate laws and to issue decrees having the force of law. In addition to this, he is the supreme commander of the armed forces and presides over the meetings of the Supreme Defense Council (CSD).

The importance of this Council is evident in its composition and duties. Besides the President, the other members include: the Prime Minister; the Foreign, Defense

and Interior ministers; the Chief of Staff of the Armed Services; the Chiefs of Staff of the three individual branches of the armed services; and anyone else the President sees fit to include (the Commander of the Carabinieri, for example). The duties of the Council are loosely defined as providing "guidance" for the nation's defense policy. The Council has discussed such diverse problems as the presence of nuclear weapons on Italian soil to the problem of military pay. The significant difference between the CSD and its contemporaries, throughout the rest of the government, lies in the fact that the CSD is not directly responsible to the Parliament.⁸⁷

The Constitution also lays down restrictions to the independent exercise of the President's powers. Essentially, no act of the President is legal until it has been countersigned by the responsible minister. Any measure having the value of law must also be countersigned by the Prime Minister.

The President is more secure in his position than any other political leader. His seven-year term of office is fixed and is not subject to votes of confidence. Once elected by a joint session of both houses, he is relatively safe from outside pressures. He can only be impeached on

87. Silvestri, "The Italian Paradox," p. 142.

charges of high treason or attempted overthrow of the Constitution.

The President's legal power is basically negative in nature. He can make suggestions to ministers, but they are not obligated to follow them. He can refuse to sign a bill or decree. Parliament (and the parties) can get around this obstacle by repassing the bill with a simple majority. The situation becomes somewhat more sticky should the President decline to issue a decree. Apparently the Constitution makes no mention of the manner of redress available to the Cabinet should this predicament occur.

All in all, the office of the President presents some interesting possibilities in the form of a limited check and balance system on the Parliament. No matter what his political interests, a President with no desire for re-election could conceivably make things rather difficult for the party-controlled Parliament. As in some other governmental positions, the capabilities and ambitions of the individual largely determine the strength of the office.

C. THE INFLUENCE OF ECONOMIC PRESSURES ON THE ARMED FORCES

The Italian economy is based on private enterprise with governmental participation in the major industries and services. The economic system can be regarded as dualistic in nature. The agriculturally rich and industrially sophisticated north is dominated by an advanced industrial

sector comprised of state holding companies and huge multinational corporations. Southern Italy, including Sicily and Sardinia, is backward by comparison. This region is agriculturally poor and maintains traditional small-scale industry that cannot hope to compete effectively with the north. The country, on the whole, is energy poor and lacks adequate mineral resources to meet industrial demands.

In the area of foreign trade, Italy's major imports are raw materials, fuel and foodstuffs. Close to eighty percent of the country's energy requirements come from oil imports, fifteen percent of which comes from Libya and twenty percent from Iraq.⁸⁸ Pressing energy needs have promoted a continued interest in maintaining positive relations with a wide variety of nations, including the Soviet Union.

An agreement on the sale of more than 100,000 million cubic meters of Soviet natural gas to Italy over a period of 20 years and on the sale of Italian equipment, pipes and materials for the Soviet gas industry, was signed with ENI (National Hydrocarbons Agency) on December 10, 1969. Speaking at the ceremony opening the USSR-Italy gas pipeline at San-Donato Milanese, a suburb of Milan, on June 8, 1974, the Italian Prime Minister expressed the hope that the new pipeline would be a powerful stimulus for further expansion of cooperation between the two countries and usher in an important stage of their long-standing and successfully developing contacts. In April 1975, ENI concluded a new contract on the purchase of Soviet gas.⁸⁹

88. Ibid., p. 130.

89. V.I. Belov, Socialist Policy of Peace, Moscow: Progress Publishers, 1979, pp. 338-339.

The economic situation places certain constraints on the political system as well as on the allocation of resources. Over the past 20 years, Italy's economy has suffered a general decline from the more prosperous era of the 1950's and 1960's. Stefano Silvestri, in his article titled, "The Italian Paradox," mentions several factors contributing to the worsening Italian economic situation: failure of the Italian government to match the slowdown in economic activity with a corresponding reduction in the growth of public expenditures; continued dependence on oil and its growing cost; the relatively high percentage of GNP absorbed by social services; and the continuing problems presented by the socioeconomic backwardness of the South.⁹⁰ Italy has chosen European standards of living but the absorption of a large portion of the GNP by the underdeveloped region in conjunction with an annual inflation rate of roughly sixteen percent has placed considerable strain on the national budget. Politically speaking, the government is forced to commit sizeable resources to the welfare effort in an attempt to narrow the distance between economic reality and public expectations.

The Italian defense establishment has been seriously affected, but not totally overwhelmed, by the economic

90. Silvestri, "The Italian Paradox," p. 132-133.

problems to date. This is partly due to the institutional framework existing within the government. The Parliament exercises some control of the defense budget through the Ministry of Defense. Major strategic defense policy decisions are normally processed through the CSD. The Council plays the key role in establishing both the defense policy and the defense budget. Until recently, the Parliament has never really studied or contested defense problems or their related expenditures.⁹¹

Antonio de Marchi contends that, in large measure, the armed forces' problems are directly related to the low level of Italian defense expenditures. Italy spent only 2.6% of its GNP on defense in 1982. In comparison, the FRG spent 4.3%, France spent 4.1% and Great Britain spent 5.1%.⁹² For a more recent comparison in defense spending among European members of NATO, refer to Figure 10. The economic problems mentioned earlier, especially the sixteen percent inflation rate and the large social welfare programs, have a negative impact on the defense budget. Italian defense spending increased almost six-fold, in current lire, from 1970 to 1982. Unfortunately, actual purchasing power has remained relatively static based on 1970 constant lira

91. Ibid., p. 142.

92. IISS, The Military Balance 1983-84, pp. 125-126.

value. (See Figure 11.) During the period of 1970 to 1980, there was a significant downward trend in defense expenditures as a percentage of the total state budget. The high point, 1972, saw 19.6% of the budget spent on defense. In 1980, only 10.1% of the budget went for the armed forces. (See Figure 12.) The portion of the defense budget allocated to pay and general supporting services appears to have been somewhat excessive in relation to funds allotted for equipment purchases and research and development. Up to 1980, pay and general costs accounted for roughly sixty percent of the budget while approximately forty percent was spent on hardware and related areas. The following figures, for 1972, provide a general basis for comparison:

	Pay/General Costs (%)	Hardware/Related Areas (%)
Great Britain	45	50
France	40	60
West Germany	44	56
U.S.A.	50	50
Canada	64	36

Source: IISS, The Military Balance 1973-1974, Cambridge: Heffers Printers Ltd., 1973, p. 76.

The following year, 1981, witnessed a huge increase in the military budget. This amounted to a total of 7,511 billion lire which was a thirty percent increase over 1980's 5,780 billion lira defense allocation. Personnel and supporting costs still represent fifty-three percent of the total with the remainder going to purchase and research

FIGURE 10

Defense Spending

(% of GNP)

1982

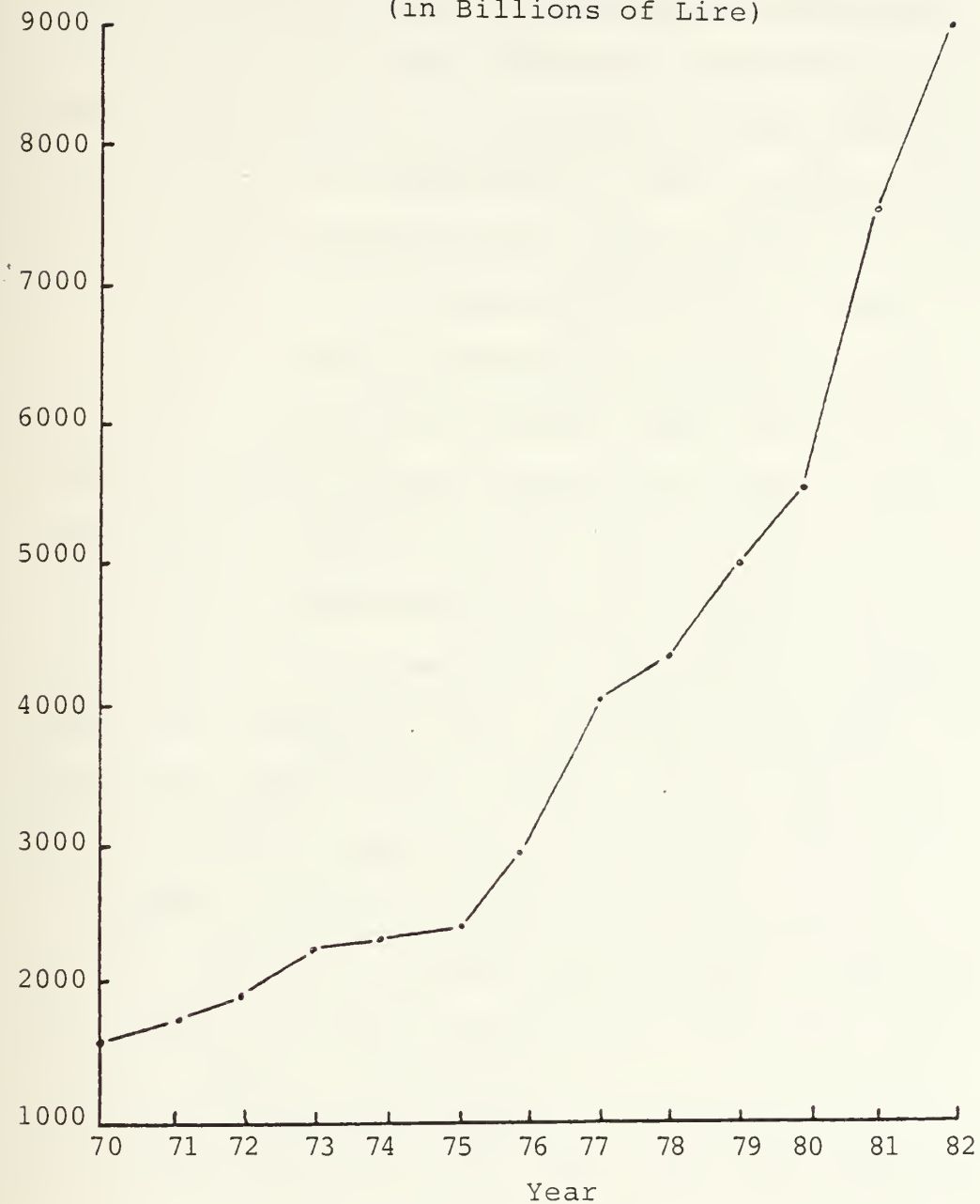
<u>Country</u>	<u>GNP</u>	<u>Defense Spending</u>	
	(Billions of \$)	(% of GNP)	(Rank)
Belgium	84.3	3.3	5/6
Britain	473.4	5.1	2
Canada	293.4	2.0	9/10
Denmark	56.4	2.0	9/10
France	537.3	4.1	4
W. Germany	659.1	4.3	3
Italy	347.3	2.6	8
Netherlands	137.0	3.3	5/6
Norway	56.4	3.0	7
U.S.A.	3,011.6	7.2	1

Source: International Institute for Strategic Studies,
The Military Balance 1983-84, Cambridge: Heffers
 Printers Ltd., 9183, pp. 125-126.

FIGURE 11

DEFENSE EXPENDITURES

(in Billions of Lire)

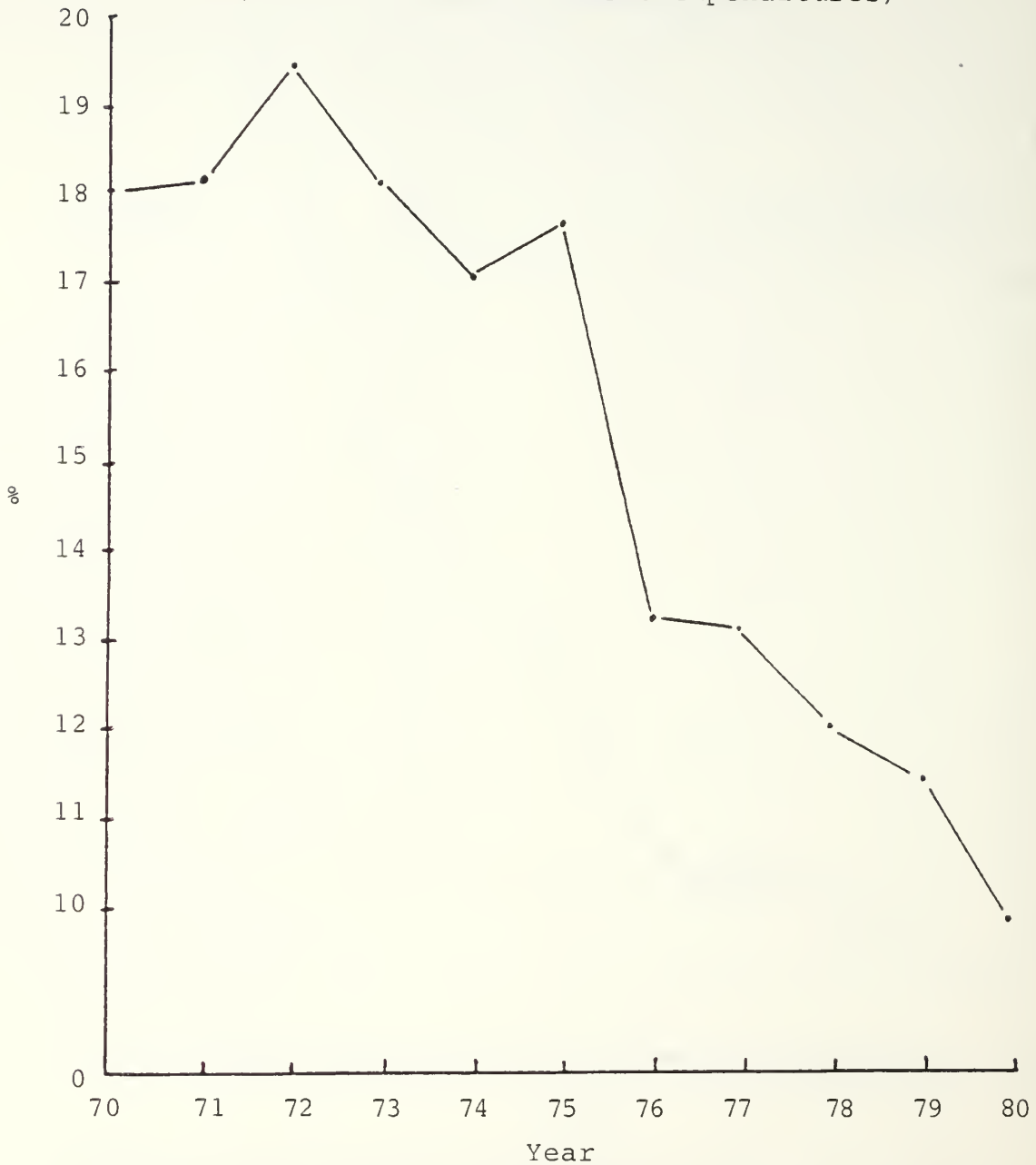


Source: International Institute for Strategic Studies, The Military Balance, Cambridge: Heffers Printers, 1970-1983.

FIGURE 12

DEFENSE EXPENDITURES

(% of Central Government Expenditures)



Source: William B. Staples, ed., World Military Expenditures and Arms Transfers: 1971-1980, Washington, D.C.: U.S. Arms Control and Disarmament Agency, 1980, p. 53.

programs. Acquisitions of new weapon systems accounted for twenty-one percent of the total budget. This indicates a positive increase of roughly fifteen percent over the 1980 programs.⁹³ Another obstacle apparently overcome in 1981 was the system of "percentage sharing" employed by the armed forces. For the past 30 years, funds were allocated to the three branches on the sole criteria of overall size. In general, the Army received forty-five percent of the budget, the Air Force, approximately thirty percent, and the remaining twenty-five percent was given to the Navy. Defense Minister Lagorio stressed the need for inter-service planning in a report to Parliament in June of 1980. He stated that: "Beginning in 1981, and for the first time, resources will be allotted on the basis of an inter-service appraisal, abandoning the previous, unsuitable system of percentage sharing."⁹⁴ This will, hopefully, have a positive and far-reaching effect on all aspects of readiness and budget management within the armed forces. In actuality, the system has changed only slightly since 1981. The percentages of funds allocated to the three services have remained basically the same.⁹⁵

93. Silvestri, "The Italian Paradox," pp. 144-145.

94. Antonio de Marchi, "Italian Defense in the 1980's: Part 1, "Jane's Defense Review", Vol. 2, No. 2, p. 156.

95. de Donno, Interview of 8 February 1984.

In the early 1970's, the Italian government (specifically the Ministry of Defense) was influenced by several factors in its decision to initiate a large scale modernization and restructuring program for the armed forces. Increasing Soviet strength in the Mediterranean, reductions in Allied naval forces, general obsolescence of Italian equipment, a shortage of defense funds and the overall inefficiency of Italy's military services have been presented by various authors as the driving forces behind Italian rearmament. Antonio de Marchi states that:

Basically the government and the military made a very pessimistic appraisal of the status of Italian defense. This led to the conclusion that a vast and profound restructuring was urgently needed. The restructuring was aimed at smaller armed forces, but more efficient and better equipped.⁹⁶

In the mid-1970's, the Italian Parliament passed three special promotional laws (leggi promozionali). These laws were intended to finance numerous modernization programs for all three branches of the service. These instruments were further intended to develop or "promote" Italy's defense industry. The funds, provided for by these laws, were over and above those contained in the annual defense budgets. The laws were instituted as follows: the Navy in May 1975; the Air Force in February 1977; and the Army in June 1977.

96. de Marchi, "Italian Defense in the 1980's: Part 1," p. 154.

The different initiation dates are a good example of the lack of inter-service planning prior to 1981.

The Legge Navale (naval law) provided the Navy with approximately 1,000 billion lire for an ambitious new ship-building program. Figure 13 provides a general description of the program as of early 1981:

Figure 13

Legge Navale

	Total Planned	Inflation Delayed	Remarks
ASW carrier	1	-	About to be laid down
Guided-missile destroyers	2	2	Both delayed
'Maestrale' class frigates	8	(2)	2 added again, 1 launched, 5 under construc- tion
'Sauro' class	2	-	Both launched, to be commis- sioned in 1981
'Sparviero' class hydrofoils	6	-	1 completed, 5 under construc- tion
Minehunters	10	6	4 under con- struction
LPD/training ship	1	1	Delayed
Salvage ship	1	-	Completed
Replenishment tanker	1	-	Completed
AB 212 helicopters	36	9	Deliveries on schedule

Source: Jane's Defense Review, 1981, Vol. 2, No. 3, p. 267.

Since the passage of this law, inflation and the related increase in the costs of individual weapons systems have resulted in a requirement for an additional 2,384 billion lire to complete the program as originally envisioned.⁹⁷

The Army was initially provided with 1,115 billion lire for acquisition of modern weapons. The structure of the Army has basically shifted towards a fully mechanized force. By 1980, program costs had tripled from the original requirement. The program cost is now 3,358 billion lire.⁹⁸ Despite the staggering increase in costs, the program has had a very positive effect on the overall efficiency of the Army. Figure 14 illustrates this fact.

The Air Force Law provided 1,265 billion lire for new equipment. The Air Force program was based on a reduction of active squadrons from fifty to forty-one and the replacement of aging F-104 and G-91 aircraft with Panavia TORNADO MRCA and Brazilian/Italian AMX aircraft. Program costs have increased almost fourfold to 4,300 billion lire!⁹⁹ Astronomical increases in the cost of the TORNADO program are largely responsible for this problem.

97. Ibid., p. 156.

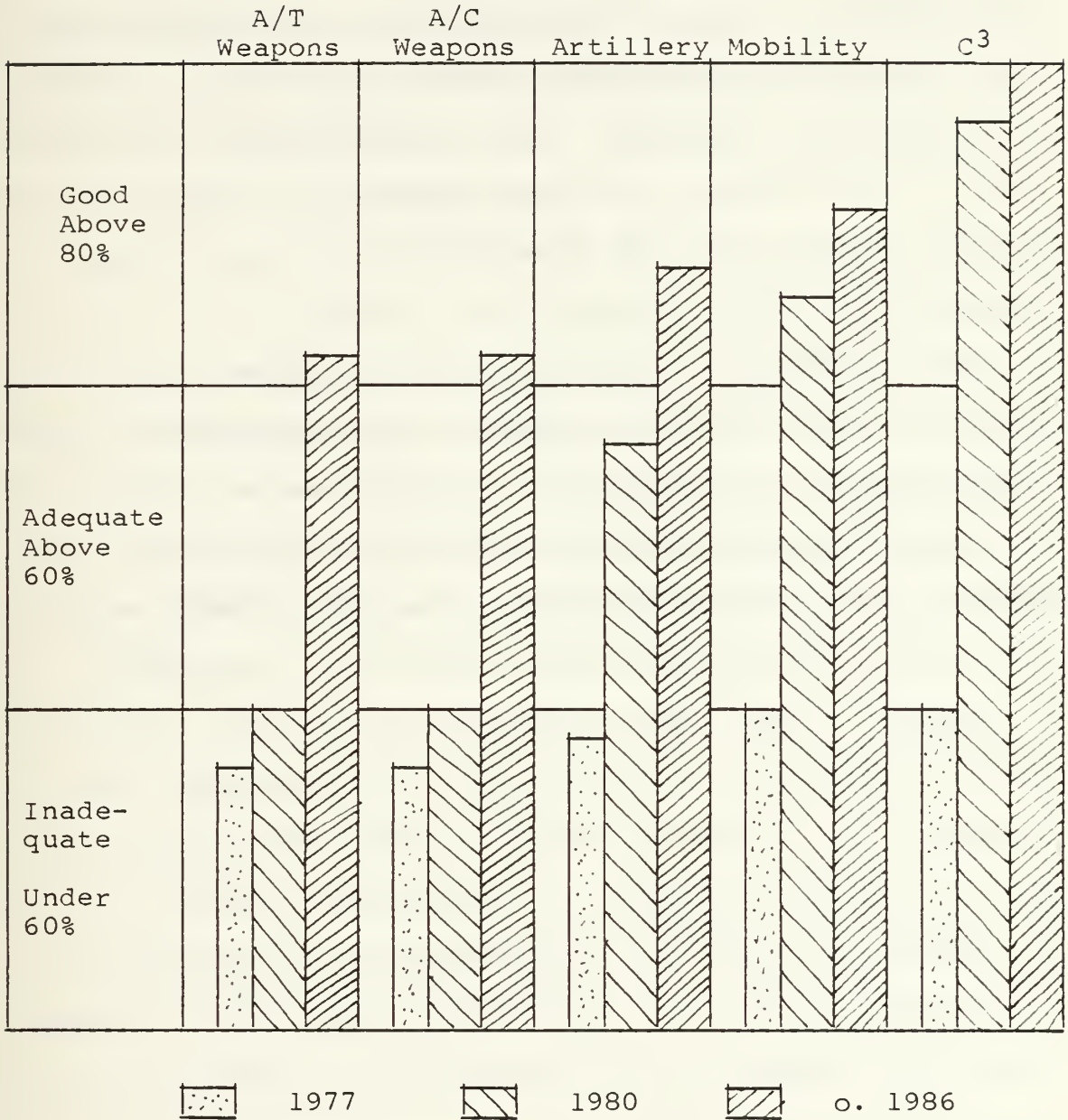
98. Ibid., p. 156.

99. Ibid., p. 157.

FIGURE 14

READINESS OF THE ITALIAN ARMY*

(at different stages of the "promotional law")



* Source: Jane's Defense Review, Vol. 2, No. 2, 1981, p. 156.

The modernization process was scheduled to be completed sometime during 1985-86. Inflation-induced delays have set the completion dates, for all three programs, back to the end of this decade. In 1981, a ten-year defense program was established to correct the deficiencies of the promotional laws. This plan incorporates several interesting features: implementation of greater inter-service planning; provision for a real increase of three percent annually, in the defense budget; and the organization of a quick-reaction mobile force.¹⁰⁰

The government's desire to keep the military politically neutral is an additional factor for consideration. The armed forces have traditionally stayed out of politics and have remained loyal to the government and constitution. Two events, during the period between the early 1960's and mid-1970's, prompted grave concern within the government. In the summer of 1964, General Giovanni di Lorenzo, the head of Italy's state security organization (SID) prepared lists of persons to be arrested should a political crisis occur. This action was the result of the expressed concern, of the DC leadership, over the increasing power of the leftist parties (PCI and PSI). Di Lorenzo did this without informing either the Ministry of the Interior or the senior military

100. de Marchi, "Italian Defense in the 1980's: Part 2," p. 342.

leaders. Parliament eventually determined that he had behaved improperly, but they did not actually accuse him of plotting to overthrow the government.¹⁰¹ The second event occurred in December of 1974. General Vito Miceli (head of the SID) and another army general were accused of plotting a coup in 1970. Subsequently, an additional eighty-two individuals were brought to trial for participating in the conspiracy.¹⁰²

Italy's political leadership has worked to discourage senior military officers from becoming involved in politics.

In this regard, it is worth noting that the military reform legislation was promulgated shortly after the culmination of the second event. A military preoccupied with force modernization and inter-service budgetary conflicts, is less likely to become involved in political intervention.

101. Keefe, Area Handbook for Italy, p. 247.

102. Ibid., p. 248.

VI. INFLUENCE OF COMMERCIAL INTERESTS

A. GENERAL CHARACTERISTICS OF THE BUSINESS COMMUNITY

Italy's business community is highly concentrated. A small number of firms dominates the national market and possess most of the capital. In 1979, a total of 353 Italian firms were included among a list of Europe's 5,000 largest companies. Only the top ten of these mega-corporations have a major impact on the Italian political scene. These entities can be divided into two broad groups: those that are state-owned and those that are privately owned. The following table provides a list of these firms and their principle products:

The Top Ten in Business

1.	I.R.I. Istituto Riccostruzione Inc.	Various
2.	E.M.I. Ente Nazionale Indrocarburi SPA	Petroleum, Chemicals
3.	Montedison SPA	Chemicals
4.	AGIP	Fuel, Gasoline
5.	FIAT	Transportation Equipment
6.	E.N.E.L. Ente Naz Per L&EM SPA	Electricity & Gas Supply
7.	Finsider	Iron & Steel
8.	Stet. Soc. Finanziaria Telefonica	Electrical Machinery

9. Esso Italiana

Petro-Refining

10. Italsider

Iron, Steel

Source: Europe's 5,000 Largest Companies, 1979.

It is of interest to note that several of these firms are state-controlled. Between them, they are the parent companies of approximately 1,000 individual firms. Close to one-half of this number are banks or other financial institutions.¹⁰³ Italy's banking industry is largely government-owned. Close to eighty percent of the banks are run by the government, and the remainder are privately owned.

Italian industry is organized into many trade associations and chambers of commerce. These all belong to one large national association, the Confederation of Industry (Confindustria). It appears that neither Confindustria nor the individual trade associations have much in the way of political power.

Industry has a variety of means for influencing the country's political policies. These include, but are not limited to, the following: the press; the financing of political parties; access to the administrative branch of the government; and the Church.

103. Who Owns Whom - 1975/76, London: O.W. Roskill & Co., Ltd., 1976, Italian Section, pp. 1.1-1.35.

The newspaper business is a big business requiring big investments. Unlike several other Western countries, the majority of newspapers in Italy are not owned by firms who are primarily engaged in that business. Instead, they are owned by corporate bodies engaged in numerous areas of industry such as petroleum, banking, transportation, etc.¹⁰⁴ The papers become instruments for promoting the parent company's major interests. The same can be said for the party and Church-controlled press. This influence is somewhat limited by the public's general inattention to political news.

Little is known about the funding methods utilized by the political parties. Italian party members do not contribute to campaign funds--many do not even pay their dues. The parties must therefore depend on a few large contributions in lieu of many smaller ones. It is at this point that speculation runs rampant. Business contributions, foreign money and possibly even Church funds are all potential sources of party financing.

B. THE DEFENSE INDUSTRY AND THE ARMS TRADE

Italy possesses a sizeable armaments industry. The sale of military hardware, both domestically and abroad, accounts

104. Ibid., pp. 1.1-1.35.

for a significant degree of national income. Between 1976 and 1980, Italy supplied the world with 2.8 billion dollars worth of arms. The developing nations were the major recipients. African countries purchased 1.2 billion dollars worth of military equipment while OPEC members accounted for another 1.3 billion.¹⁰⁵ In 1980, armaments accounted for 0.1 percent of total Italian imports and 0.8 percent of Italy's total exports.¹⁰⁶ In the past, the Italians relied heavily upon the United States as their primary source of arms imports. The Federal Republic of Germany and Switzerland provided Italy with a secondary source of weapons and related military systems. Since the mid-1970's, the trend has been reversed. The Italians are now exporting roughly five times as much as they are importing. The following table is indicative of this trend:

(\$ millions)

<u>Year</u>	<u>Imports</u>	<u>Exports</u>
1976	140	370
1977	140	380
1978	150	750
1979	110	675
1980	120	650

Source: William B. Staples, ed., World Military Expenditures and Arms Transfers: 1971-1980, Washington, D.C.: U.S. Arms Control and Disarmament Agency, 1980, p 95.

105. Williams B. Staples, ed., World Military Expenditures and Arms Transfers: 1971-1980, Washington, D.C. U.S. Arms Control and Disarmament Agency, 1980, p. 117.

106. Ibid., p. 95.

The force behind the trend can be found in the increasing instability of the international arena. The defense manufacturers have entered and cultivated the incredibly lucrative Third World market. Italy has exported some military equipment to fellow members within the North Atlantic Alliance as well. Aircraft and naval surface combatants have proven to be the major export items in the highest demand. (See Figure 15.)

Italy's armament industry revolves around approximately three dozen major contractors. The defense manufacturers can be broken down into six separate groups in relation to their general products: aircraft; warships; missiles; vehicles; ordnance; and electronics. The firms can be further divided into those that are privately owned, and those that are controlled by government holding companies. The bulk of the industry is concentrated in the production of aircraft, ordnance and electronics. (See Figure 16.)

Over the past several decades, the Italian government has established several state-owned holding companies. Through these companies, the government exerts varying degrees of influence over certain aspects of the domestic industry. This was perceived as a necessary step in the attempt to control the complex and often unstable economy. The Instituto per la Ricostruzione Industriale (IRI) is the largest of the state-controlled industrial institutions.

FIGURE 15

Italian Armament Exports

<u>Year</u>	<u>Recipient</u>	<u>Equipment</u>
1968	F.R.G. Pakistan	Aircraft Tanks
1971	Belgium, Congo, Zambia	Aircraft
1972	Singapore, South Africa, Argentina Ethiopia, Turkey	Aircraft Helicopters
1973	Iran, Lebanon, Libya, Philippines, Thailand, Rwanda, Zaire & Zambia	Aircraft & Helicopters
1974	Eire and Portugal	Aircraft
1975	Abu Dhabi, Iran, Malaysia, Philippines and Zambia	Aircraft & Helicopters
	Peru	Frigates & SAM
	Venezuela	SAM
1982	Somalia, Zaire & Venezuela Libya, Nigeria & Cameroon Greece Morocco Saudi Arabia Egypt	Aircraft Artillery Artillery & SAM SAM APC Helicopters
1983	Ghana, Nigeria, Zimbabwe, Malaysia, Peru & Venezuela Somalia Saudi Arabia U.A.E. Libya	Aircraft Tanks Artillery Patrol Boats FAC & Corvettes

Source: IISS, The Military Balance, 1968-1983.

FIGURE 16

Italian Defense Manufacturers

Aircraft

Aeritalia
Aermacchi
Agusta
Alfa Romero
Bredanardi
Caproni Vizzola

Elicottieri Merdionali
Fiat Aviazione
General Avia
Piaggio
Siai-Marchetti

Warships

Ansaldo Leghorn
Cantieri del Tirreno
Cantieri Navali Riuniti

Intermarine
Italcantieri
Navalmeccanica

Missiles

Oto Melara
Selenia
Sistel

Vehicles

Fiat
Lancia
Oto Melara

Ordnance

Aerea
Beretta
BDP Difesa-Spazio
Borletti
Oerlikon Italiana

Oto Melara
Breda Meccanica
Simmel
Valtec Italiana
SNIA Viscosa

Electronics

Elettronica
Micretecnica
Montedison Sistemi
Officine Galileo
Selenia

OMI
Elsag
Contraes Italiana
Compagnia Generale di
Elettricità

Source: DMS, Inc., Report on NATO Europe-Italy, 1983,
pp. 4-6.

Through the IRI, and other such companies, the state has expanded its interests into all areas of banking and commerce.

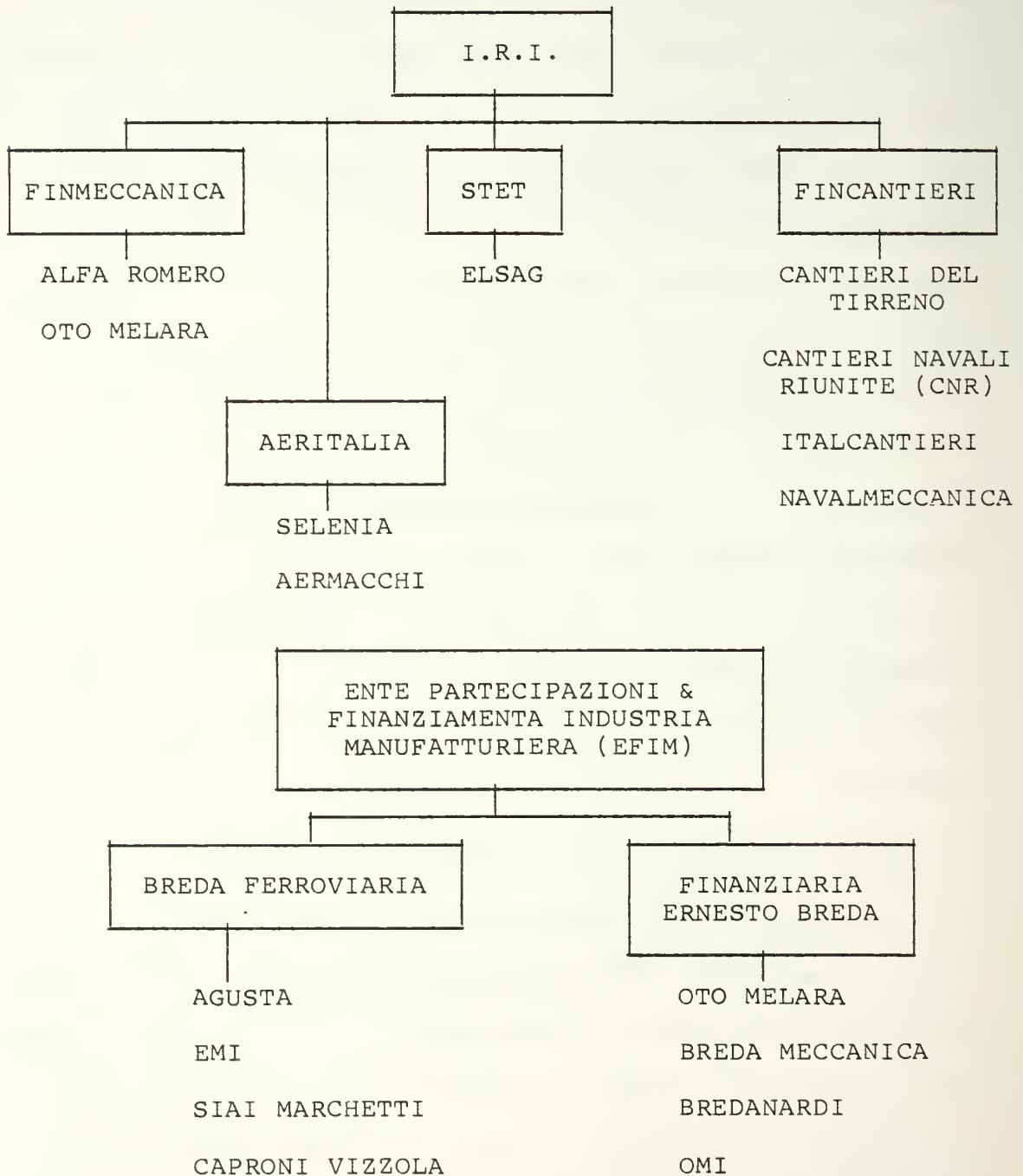
In this respect, the government indirectly applies a very strong influence on the armaments industry. The IRI and the Ente Partecipazioni & Finanziamento Industria Manifatturiera (EFIM) are the two principal government participants in defense manufacturing. The IRI is the parent company of several of the smaller firms and controls them through a series of intermediary institutions. The primary intermediaries are Finanzia Meccanico (FINMECCANICA), Fincantieri, and Finanziaria Telefonica (STET). The EFIM has overall control of a similar number of arms producers through two of its intermediaries, Breda Ferroviaria and Finanziria Ernesto Bredo (See Figure 17). A comparison of Figure 16 with Figure 2 clearly indicates the depth of the government's involvement.

C. NAVAL SHIPBUILDING AND CONSTRUCTION PROGRAMS

The government's leading role within the industry and as a policy maker has significantly influenced the direction and scope of the Navy's development. In an effort to bolster a faltering economy, priority was placed on achieving an increase in overseas sales. It was hoped that the requirements of both the military and the national industries could be melded in such a way as to be mutually

FIGURE 17

GOVERNMENT INFLUENCE IN THE DEFENSE INDUSTRY*



*Source: DMS Inc., NATO Europe-Italy, 1983, pp. 3-4.
Who Owns Whom-1975/76, 1976, pp. Italy 1-2.133

beneficial. The military was obliged to distribute its Research and Development projects to outside sources such as universities and commercial institutes. The government has promoted the development of a high level of technological skill and knowledge within the industry. This would hopefully enhance Italy's ability to effectively compete with the other major arms-exporting nations.¹⁰⁷

Additionally, the armed forces are strongly encouraged to place all production orders with domestic firms. Such transactions strengthen the national industry, but often do so at the military's expense. The tight budget that the armed forces are constrained to operate under could be more effectively utilized through the purchase of cheaper foreign systems. In spite of the above drawbacks, the long-term policy appears to be a sensible one. The reverse in import/export trends supports this position.

The Navy, while occasionally suffering higher price tags on new equipment, receives certain benefits as well. The aggressive export policy and stiff international competition provide an abundance of state-of-the-art equipment. The armed services are required to use some amount of all newly developed equipment. This helps to enhance and promote the credibility of Italian systems for sale on the open market.

107. G.R. Villar, "Italian Naval Industry: Will the Export Success Continue?" Jane's Defense Review, Vol. 3, No. 3, 1982, p. 269.

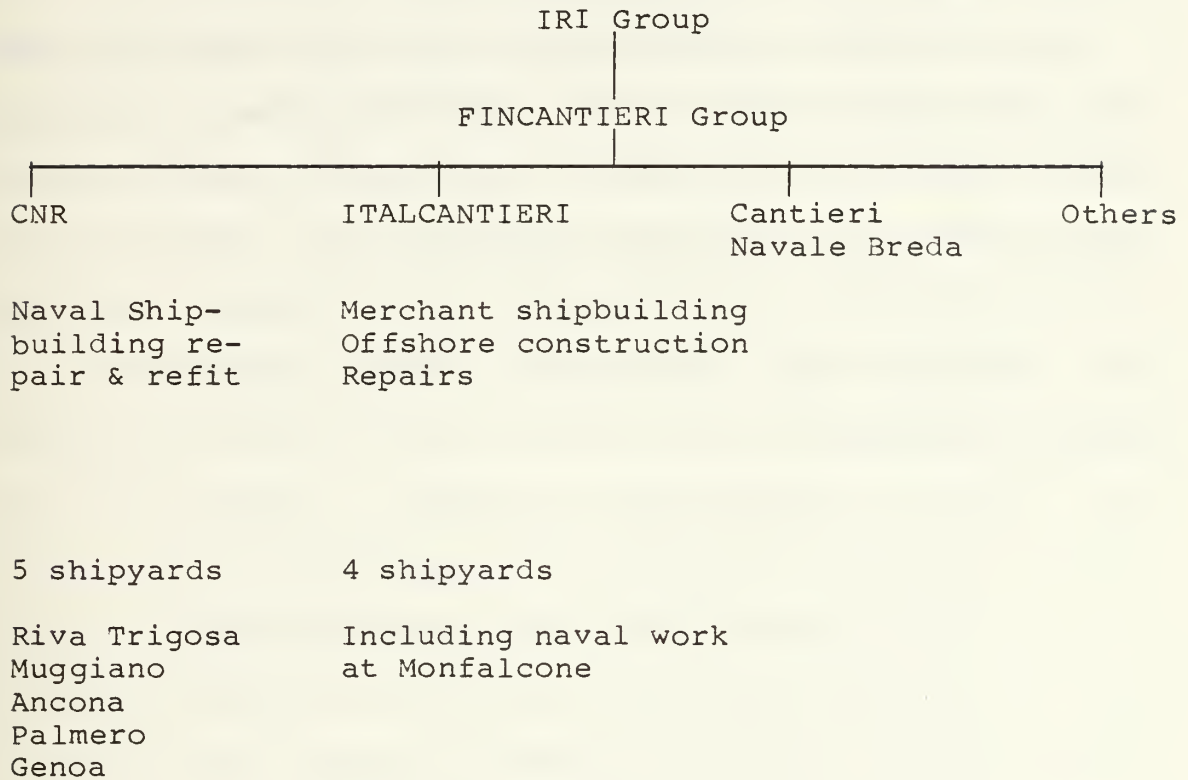
The program's greatest impact on the Navy obviously falls within the area of shipbuilding and construction programs. Italy's economic environment has made private ownership of large shipyards an untenable prospect. The shipbuilding industry rapidly expanded after World War II. The downturn in the world's economy and rampant domestic inflation brought about severe problems. Cantieri Navali Riuniti (CNR) would have gone bankrupt, in the early 1970's, if the government had not provided substantial aid in the form of subsidies.¹⁰⁸ The state subsequently nationalized the shipbuilding industry. The major shipyards have been formed into the Fincantieri group. (See Figure 18.)

Fincantieri is the largest shipbuilding and repair organization in the Mediterranean. The biggest naval contractor within the group is CNR. Italcantieri concentrates on merchant shipping, but has a minor share in naval vessel construction. A consortium of nine armaments manufacturers, led by CNR, was formed to produce all the equipment necessary for the construction of naval combatants. This consortium is called the Melara Club and is comprised of the following companies:

108. Ibid., p. 269.

FIGURE 18

ORGANIZATION OF ITALIAN SHIPYARDS*



* Source: F. de Blocq van Kuffeler, "The Italian 'Maestrale' Class Frigates," Jane's Defense Review, Vol. 2, No. 3, 1981, p. 266.

CNR
ELSAG
FIAT
Oto Melara
Elettronica

Breda Meccanica Bresciana
Elmer
Grandi Motori Trieste (GMT)
Selenia

Source: F de Blocq van Kuffeler, "The Italian 'Maestrale' Class Frigates," Jane's Defense Review, Vol. 2,, No. 3, 1981, p. 269:

The attitudes of the Italian business community, the deep involvement of the state, and the growing arms trade program, have all contributed to the Navy's current evolution in force structure and modernization. The Navy has greatly benefited from the technological advances, but has also suffered from the higher prices associated with domestic purchase.

VII. CONCLUSIONS

All of the factors considered have had some degree of influence on the evolving composition and organization of the Italian Navy. Each individual element has directly affected the Navy's present situation in one manner or another. These same factors have exerted a form of indirect control over the military's restructuring process, through their interaction within the overall political-economic system.

The evidence presented suggests that the single most important factor in the military force improvement process is the economy. Economic considerations underlie many aspects of the government's stance on national defense. Italy's energy dependence and shaky economy are a source of unending concern to the public and politicians alike. Fear regarding the country's uncertain economic future pervades all strata of the social structure. Massive inflation and ongoing problems in the industrially under-developed South are perceived as problems of the utmost urgency.

The root of the government's policy dilemma lies in the social heritage of the Italian people. The acceptance of the family unit as the primary institution in Italian society has led to a sometimes overwhelming preoccupation with individual survival. The majority of the public is concerned with the prevailing conditions applicable to their

immediate environment. This, in turn, affects the attitude and actions of the political parties, the bureaucracy and the leadership of the government. The politicians are survival-oriented, as well. They are constantly aware of the oftentimes unarticulated pressure of the masses. Politicians and their respective political parties, want to remain in power. This goal is often achieved at the expense of issues which are more international in nature. The defense budget, important in and of itself, is normally of less significance than more pressing domestic issues. Consequently, the military is obliged to make the most of a frequently inadequate budget. Big business promotes itself both through government influence and through external means. International arms trade has bolstered the Italian economy, but has proven to be a mixed blessing to the armed forces.

In essence, the economy greatly affects all aspects of the Navy's reorganization process. The influence of the other factors in this assessment is significantly tempered by economic and resulting political considerations.

Italy's commitment to NATO has remained positive and flexible from the beginning. In the past, this association was the key factor in determining the composition and role of the Italian armed forces. It still plays a large part in controlling the direction of Italy's naval development. The very nature of the missions assigned by NATO largely

influence the structure and goals of all three services. Naturally, each branch of the armed forces perceives its mission to be the most critical and acts accordingly. Some of the Navy's current problems are aggravated by, or stem from, NATO's strategic policies in regard to the South Flank. The concentration of the bulk of Italian Army and Air Force units in the northern portion of the peninsula is a primary example.

Italian defense policies have evolved around the country's affiliation with the North Atlantic Alliance for over three decades. Despite the effect of the other factors involved, this association is so firmly ingrained that only a sudden, radical change in Italy's government or economy could appreciably alter it.

This commitment has had a strong influence on the Navy's development, but to a somewhat lesser extent than the economic forces.

The two most important historical lessons learned by the Navy involve its wartime experience with submarines and aircraft. This fact is readily apparent when one observes the general characteristics of the Navy's surface combatants. While these vessels are well suited to perform in all combat environments, the heaviest emphasis has been placed on ASW and anti-air defense systems.

The Navy has retained its corporate memory in relation to the effectiveness of submarines in a variety of roles.

Italian experience in World War I resulted in their possessing the second largest submarine fleet in the world at the outbreak of the Second World War. Shipping losses to submersibles during both wars has promoted a keen interest in the development and improvement of ASW operations. It must be conceded that the Navy's substantial ASW capabilities are due, in part, to its current, and projected, NATO missions and are a reflection on the nature of the Soviet submarine threat.

The Italian experience with naval aviation got off to a good start in the First World War. Their pioneering spirit displayed considerable potential. Mussolini's creation of the Air Force and the related concept of "all that flies, belongs to the Air Force and all that floats, belongs to the Navy" contributed much to the current inadequacies. The Navy learned a very bitter lesson about the worth of carrier-launched aircraft at Taranto in 1940.

Italian admirals have continually lobbied for a fixed-wing carrier component of their own since before World War II. Historical forces, in conjunction with parliamentary legislation, have effectively stymied their efforts. Thus, the Navy has had to rely on its own short and medium range missile defenses and a less than adequate air support provided by a few Air Force squadrons.

A potential change in this pattern has developed recently. The GARIBALDI is currently slated to carry only

helicopters for its airborne complement. However, the ship is fully capable of carrying a number of VSTOL fixed-wing aircraft. The recent events in Lebanon have produced a situation in which the Navy's historic deficiency in the area of naval aviation might be exploited to the maritime force's advantage. The notorious bombing attacks against the multi-national peace-keeping troops in Beirut is the case in point. Aircraft from French and American carriers were launched on retaliatory strikes. While these strikes may not have achieved much in a tactical sense, they upheld the notion of "cutting a good figure." The Italians had no such ship from which they could conduct a similar operation. They did attempt to dispatch an Air Force squadron to the area. The intent was to launch a strike from the British base on Cyprus. Both the Cypriots and the British refused the Italian request.¹⁰⁹ This situation has provided a potential opening for the Navy in its quest for organic air support.

Should the Navy acquire its own fixed-wing aircraft, the question of their actual employment arises. Several versions of BAe HARRIER VSTOL aircraft are currently in use worldwide. The type purchased by Italy would largely determine the overall improvement in the GARIBALDI's

109. de Donno, Interview of 8 February 1984.

capabilities. The Lebanon situation once again provides a suitable case in point. If the Italians had the GARIBALDI in an operational status with a complement of HARRIERs aboard, would an airstrike have been effective or even feasible? If the version employed was similar to the interceptor version used by the Royal Navy (FRS. Mk1 SEA HARRIER), the answer is no. If the aircraft were similar to the RAF's ground support version (GR. Mk3), the answer is a qualified maybe. The HARRIER's capability for launching from small decks is somewhat offset by its short range and modest payload.¹¹⁰ Thus the possession of one small aircraft carrier, equipped with a small number of limited performance aircraft, would provide the Navy with a severely restricted improvement in the area of airborne strike and defense capabilities. Greater emphasis on inter-service cooperation with the Air Force might very well be the better alternative to pursue.

In summation, all of the factors discussed have had some influence on the changing role and capabilities of the Italian Navy. As a result of this, the size of the Navy has decreased somewhat. The reduction in numbers has been partially compensated for by a significant enhancement in individual unit capabilities.

110. J.W.R. Taylor, ed., Jane's All the World's Aircraft 1983-84, London: Jane's Publishing Co., Ltd., 1983, pp. 260-262.

The Navy's current status is such that its fleet is a relatively small, but nonetheless, formidable force. Under current conditions, the Navy is capable of adequately accomplishing its assigned missions. However, any added burden placed upon it by a change in NATO strategy, a decrease in regional forces, or a sudden downturn in the economy, would probably degrade its capabilities considerably.

APPENDIX A

Italian Naval Combatants

<u>Name</u>	<u>Type</u>	<u>Speed</u>	<u>Range</u>	<u>Armament</u>
(ex-U.S. TANG)				
<u>Livio Piomarta</u>	SS	15.5	11,000	8 Torpedo Tubes
Romeo Romei	"	"	"	"
<u>TOTI</u>	SS	15	3,000	4 Torpedo Tubes
Bagnolini	"	"	"	"
Dandolo	"	"	"	"
Mocenigo	"	"	"	"
<u>SAURO</u>	SS	20	12,500	6 Torpedo Tubes
Di Cossato	"	"	"	"
Da Vinci	"	"	"	"
Marconi	"	"	"	"
<u>GARIBALDI</u>	(CVH)	30	7,000	18 Helicopters 4 SSM 2 SAM 6 Guns 6 Torpedo Tubes
<u>VITTORIO VENETO</u>	(CVH)	32	5,000	9 Helicopters 4 SSM 2 SAM 3 Guns
<u>ANDREA DORIA</u>	CG	31	5,000	4 Helicopters
Caio Duilio	"	"	"	2 SAM 8 Guns 6 Torpedo Tubes
(IMPETUOSO)	DD	34	3,000	20 Small Guns
Indomito	"	"	"	6 Torpedo Tubes 4 DCTs
<u>IMPAVIDO</u>	DDG	33	3,300	1 SAM
Intrepido	"	"	"	6 Guns 6 Torpedo tubes
<u>AUDACE</u>	DDG	34	3,000	1 SAM
Ardito				6 Guns 6 Torpedo Tubes 2 Helicopters

Appendix A

Italian Naval Combatants

<u>Name</u>	<u>Type</u>	<u>Speed</u>	<u>Range</u>	<u>Armament</u>
<u>(BERGAMINI)</u>	FF [*]	24	3,000	1 Helicopter
Fasan	"	"	"	2 Guns
Margottini	"	"	"	1 DCT
				6 Torpedo Tubes
<u>ALPINO</u>	FF	28	3,500	2 Helicopters
Carabiniere	"	"	"	6 Guns
				6 Torpedo Tubes
				1 DCT
<u>LUPO</u>	FFG	35	4,350	1 Helicopter
Sagittario	"	"	"	8 SSM
Perseo	"	"	"	8 SAM (cell launcher)
Orsa				5 Small Guns
				6 Torpedo Tubes
<u>MAESTRAELE</u>	FFC	32	6,000	2 Helicopters
Grecale	"	"	"	4 SSM
Libeccio	"	"	"	4 SAM
Acirocco	"	"	"	5 Small Guns
Aliseo	"	"	"	
Euro	"	"	"	
Espero	"	"	"	
Zeffiro	"	"	"	

* Source: Moore, J., ed., Jane's Fighting Ships 1982-83, London: Jane's Publishing Co., 1982.

APPENDIX B

NEUTRALITY AGREEMENT - MALTA-ITALY, 1980

MINISTRY OF FOREIGN AFFAIRS - REPUBLIC OF MALTA

NOTE VERBALE

The Government of the Republic of Malta presents its compliments to the Embassy of Italy in Valletta and in relation to the conversations which have taken place between the Representatives of the two Governments, has the honour to confirm that it will make a Declaration of neutrality of the territory over which it exercises its sovereignty, in the terms of the text annexed to this Note, and to request the Government of the Republic of Italy to make a Declaration recognizing such neutrality in the terms of the text also annexed to this Note, and to request the Government of the Republic of Italy to make a Declaration recognizing such neutrality in the terms of the text also annexed to this Note.

The Government of the Republic of Malta confirms its agreement that, in connection with the said Declarations, there shall simultaneously enter into force the Protocol, agreed between the Representatives of both Governments in the terms of the text annexed to the present Note, concerning the financial, economic and technical assistance which the Republic of Malta will receive from the Republic of Italy.

This note Verbale and the Note Verbale in reply thereto of the Italian Government to the Embassy of the Republic of Malta in Rome will constitute an agreement between the two countries, which will be submitted to the respective constitutional authorities competent to authorize its ratification.

Upon the exchange of the instrument of ratification, the aforesaid Declarations will be made by the two Governments and the Protocol connected therewith will enter into force.

The texts constituting the agreement between the two countries will be registered with the Secretariat of the United Nations, in accordance with the requirements imposed on members of the United Nations Organisation by Article 102 of the Charter of the Organisation.

To the text of this Note, which is drawn up in the English language, there is annexed an official translation in the Italian language, both texts being equally authentic.

The Government of the Republic of Malta avails itself of this opportunity to renew to the Embassy of Italy in Valletta the expressions of its highest consideration.

Embassy of Italy,
Valletta.

15th September, 1980.

DECLARATION
BY THE
GOVERNMENT OF THE REPUBLIC OF MALTA
CONCERNING THE NEUTRALITY OF MALTA

The Government of the Republic of Malta

Faithful to the decision of the People of the Republic of Malta to eliminate all foreign military bases after March 31, 1979 and to contribute to peace and stability in the Mediterranean region by changing their country's unnatural role of a fortress into a centre of peace and a bridge of friendship between the Peoples of Europe and of North Africa;

Conscious of the special contribution the Republic of Malta can make towards that end by assuming a status of neutrality strictly founded on the principles of non-alignment;

Aware of the support which neighbouring European and Arab Mediterranean States will give to Malta's new role and to such a status of neutrality;

1. Solemnly declares that the Republic of Malta is a neutral state actively pursuing peace, security and social progress among all nations by adhering to a policy of non-alignment and refusing to participate in any military alliance;

2. Affirms that such a status will, in particular, imply that:

a. no foreign military base will be permitted on Maltese territory;

b. no military facilities in Malta will be allowed to be used by any foreign forces except at the request of the Government of Malta, and only in the following cases:

(i) in the exercise of the inherent right of self-defense in the event of any armed violation of the area over which the Republic of Malta has sovereignty, or in pursuance of measures or actions decided by the Security Council of the United Nations; or

(ii) whenever there exists a threat to the sovereignty, independence, neutrality, unity or territorial integrity of the Republic of Malta;

but the Government of Malta will immediately inform the neighbouring Mediterranean States which have made like Declarations welcoming the present Declaration and giving appropriate undertakings, of the steps taken under this paragraph;

c. except as aforesaid, no other facilities in Malta will be allowed to be used in such manner or extent as will amount to the presence in Malta of a concentration of foreign forces;

d. except as aforesaid, no foreign military personnel will be allowed on Maltese territory, other than military personnel performing, or assisting in the performance of, civil works or activities, and other than a reasonable

number of military technical personnel assisting in the defence of the Republic of Malta;

e. The shipyards of the Republic of Malta will be used for civil commercial purposes, but may also be used, within reasonable limits of time and quantity, for the repair of military vessels which have been put in a state of non-combat or for the construction of vessels; and in accordance with the principles of non-alignment the said shipyards will be denied to the military vessels of the two superpowers;

3. Expresses its hope that, with the concurrence of the Government of the Republic of Malta, neighbouring Mediterranean States will make the declarations welcoming the present Declaration and giving such undertakings as may be appropriate. The Government of the Republic of Malta will inform each of such States of the Declarations made by other states.

DECLARATION
BY THE
GOVERNMENT OF THE REPUBLIC OF ITALY
WITH RESPECT TO THE NEUTRALITY OF MALTA

The Government of the Republic of Italy

Welcoming with satisfaction the Declaration whereby the Republic of Malta has made known that, in the exercise of its sovereignty, it has assumed a status of neutrality;

Taking note of that Declaration which, with the concurrence of the Government of the Republic of Malta, is incorporated in the present Declaration as an integral part thereof, and the text of which is as follows:

"The Government of the Republic of Malta

"Faithful to the decision of the People of the Republic of Malta to eliminate all foreign military bases after March 31, 1979 and to contribute to peace and stability in the Mediterranean region by changing their country's unnatural role of a fortress into a centre of peace and a bridge of friendship between the Peoples of Europe and of North Africa;

"Conscious of the special contribution the Republic of Malta can make towards that end by assuming a status of neutrality strictly founded on the principles of non-alignment;

"Aware of the support which neighbouring European and Arab Mediterranean States will give to Malta's new role and to such a status of neutrality;

"1. Solemnly declares that the Republic of Malta is a neutral state actively pursuing peace, security and social progress among all nations by adhering to a policy of non-alignment and refusing to participate in any military alliance;

"2. Affirms that such a status will, in particular, imply that:

a. no foreign military base will be permitted on Maltese territory;

b. no military facilities in Malta will be allowed to be used by any foreign forces except at the request of the Government of Malta, and only in the following cases:

(i) in the exercise of the inherent right of self-defense in the event of any armed violation of the area over which the Republic of Malta has sovereignty, or in pursuance of measures or actions decided by the Security Council of the United Nations; or

(ii) whenever there exists a threat to the sovereignty, independence, neutrality, unity or territorial integrity of the Republic of Malta;

but the Government of Malta will immediately inform the neighbouring Mediterranean States which have made like Declarations welcoming the present Declaration and giving appropriate undertakings, of the steps taken under this paragraph;

c. except as aforesaid, no other facilities in Malta will be allowed to be used in such manner or extent as will amount to the presence in Malta of a concentration of foreign forces;

d. except as aforesaid, no foreign military personnel will be allowed on Maltese territory, other than military personnel performing, or assisting in the performance of, civil works or activities, and other than a reasonable number of military technical personnel assisting in the defence of the Republic of Malta;

e. The shipyards of the Republic of Malta will be used for civil commercial purposes, but may also be used, within reasonable limits of time and quantity for the repair of military vessels which have been put in a state of non-combat or for the construction of vessels; and in accordance with the principles of non-alignment the said shipyards will be denied to the military vessels of the two superpowers;

"3. Expresses its hope that, with the concurrence of the Government of the Republic of Malta, neighbouring Mediterranean States will make like declarations welcoming the present Declaration and giving such undertakings as may be appropriate. The Government of

the Republic of Malta will inform each of such States of the Declarations made by other States."

1. Solemnly declares that it recognises and will respect the sovereignty, independence, neutrality, unity and territorial integrity of the Republic of Malta, and will act in conformity therewith in all respects;

2. Undertakes, in particular:

(a) not to take any action whatsoever which could in any way, directly or indirectly, endanger the sovereignty, independence, neutrality, unity or territorial integrity of the Republic of Malta;

(b) not to take any action whatsoever which could in any way, directly or indirectly, endanger peace and security in the Republic of Malta;

(c) not to take any part in any act of such nature;

(d) not to induce the Republic of Malta to enter into a military alliance, or to sign an agreement of this kind, or to accept the protection of a military alliance;

3. Invites all other States to recognize and respect the sovereignty, independence, neutrality, unity and territorial integrity of the Republic of Malta, to act in conformity therewith in all respects, and to refrain from taking any action which is incompatible with those principles;

4. Undertakes to consult, at the request of the Government of the Republic of Malta or of the Government of

a neighbouring Mediterranean State making a like Declaration as the present one, with the Government of the Republic of Malta and of the other States aforesaid whenever one of them declares that there exists a threat of violation or a violation of the sovereignty, independence, neutrality, unity and territorial integrity of the Republic of Malta;

5. 1. Without prejudice to the application of Article 35 of the Charter of the United Nations, undertakes that, on the happening of any of the events mentioned in paragraph 2(b) of the Maltese Declaration, the situation will be brought to the attention of, or referred to, the Security Council;

5. 2. It further undertakes that, at the request of the Republic of Malta and after consulting the aforementioned States, it will, in any of the events and under the conditions of the preceding paragraph 4 of the Italian Declaration, or should the need arise for the exercise of the right of self-defence in the circumstances set out in Article 51 of the Charter of the United Nations, adopt any other measure, not excluding military assistance, it will consider necessary to meet the situation;

6. Reserves the right, if it considers that changes have taken place which alter substantially the neutrality of the Republic of Malta as envisaged in the Declaration of the Government of the Republic of Malta reproduced above, to request that consultations take place between it and the

Governments of the Republic of Malta and of other neighbouring Mediterranean States making a like declaration as the present, and if, following such consultations, it considers that the maintenance of the neutrality of Malta is not ensured, it may decide to cease to be bound by the present Declaration. Any such decision will be communicated to the Republic of Malta and other interested States.

PROTOCOL

RELATING TO FINANCIAL, ECONOMIC AND TECHNICAL ASSISTANCE
BETWEEN THE REPUBLIC OF ITALY AND THE REPUBLIC OF MALTA

The Government of the Republic of Italy,

The Government of the Republic of Malta,

desirous of intensifying their friendly relations and of cooperating for their reciprocal development and the security of their region, have agreed as follows:

ARTICLE I

The Government of the Republic of Italy undertakes to make to the Government of the Republic of Malta for a period of five years commencing from 1979, a financial contribution in the sum of twelve million United States dollars each year.

ARTICLE II

With the object of favouring and promoting the economic and social progress of Malta, the Government of the Republic of Italy shall make available to the Government of the Republic of Malta, according to the procedures set out in Law No. 38 of 9 February, 1979, a concessionary financial credit of fifteen million United States dollars, to be utilised in development projects to be identified by agreement between the parties.

ARTICLE III

Within the framework of the collaboration between the two countries, the Government of the Republic of Italy will contribute to the economic and social and to the technical and cultural development of Malta through the implementation of projects of cooperation, envisaged by the law of the Italian Republic No. 38 of 9 February, 1979, in an amount of not less than four million United States dollars per annum, to be utilised before the end of 1983.

While the status of the Italian cooperating personnel in Malta and of the Maltese personnel on scholarship in Italy will be guaranteed by agreements made specifically for that purpose, the Government of the Republic of Malta will ensure that the necessary cooperation will be afforded to the competent Italian institutions, in order that they may fulfill the requirements of the law mentioned in the first paragraph of this Article.

ARTICLE IV

The Government of the Republic of Malta will, in respect of each payment of the financial contribution envisaged under Article 1 of the present Protocol, forward to the Government of the Republic of Italy the most appropriate indications concerning the public works and the socio-economic development programmes financed during the year out of the said contribution. The Government of the Republic of

Malta will furthermore, in relation to the utilization of the finances provided under the preceding Article II, supply the documentation concerning the individual projects or programmes intended to favour or promote the economic and social progress of Malta.

ARTICLE V

In order to facilitate the realization of the objectives of the present Protocol, there shall be set up a Mixed Commission, whose members shall be designated by the respective Ministers of Foreign Affairs.

The Commission shall meet alternately in Malta and in Italy at least once a year and whenever it shall be deemed necessary.

ARTICLE VI

The manner in which this Protocol shall be implemented shall be regulated on the basis of specific agreements concluded by the technical authorities of the two countries.

MINISTERO DEGLI AFFARI ESTERI
REPUBBLICA ITALIANA

NOTE VERBALE

The Ministry of Foreign Affairs presents its compliments to the Embassy of the Republic of Malta in Rome and, with reference to the Note Verbale dated 15 September, 1980 forwarded by its Government to the Embassy of Italy in Valletta in relation to the conversations which have taken place between the Representatives of the two Governments, has the honour to confirm that the Government of the Republic of Italy will make a Declaration recognising the neutrality of the territory over which the Government of the Republic of Malta exercises its sovereignty, in the terms of the text annexed to the aforesaid Note, in relation to the Declaration of neutrality made by that Government, in the terms of the text also annexed to the said Note.

At the same time the Government of the Republic of Italy confirms its agreement to the text of the Protocol, connected with the said Declarations, concerning the financial, economic and technical assistance which the Italian Republic will provide to the Republic of Malta, in the terms of the text annexed to the Note aforesaid.

That Note Verbale and the present Note Verbale will constitute an agreement between the two countries, which will be submitted to the respective constitutional authorities competent to authorize its ratification.

BIBLIOGRAPHY

Attivita Promozionali della Marina Militare. La Marina Militare Italiana. Rome: Stampa Stilgraphica, 1983.

Attivita Promozionali della Marina Militare. La Unita della Marina Militare. Rome: Stilgrafica, 1983.

Barzini, Luigi. The Italians. London: Hamish Hamilton, Ltd., 1964.

Basagni, Fabio and Flynn, Gregory A. "Italy, Europe and Western Security." Survival. Vol. 20, No. 3, May/June 1977.

Belov, V.I. Socialist Policy of Peace. Moscow: Progress Publishers, 1979.

Bonsignore, Enzo. "Giuseppe Garibaldi: The Italian Navy's TDC." Proceedings. March 1982.

Caligaris, Luigi. "Italian Defense Policy: Problems and Prospects." Survival. Vol. 23, 1983.

Couhat, J.L., ed. Combat Fleets of the World 1980/81. Annapolis, MD: Naval Institute Press, 1980.

de Marchi, Antonio. "Italian Defense in the 1980's: Part 1." Jane's Defense Review. Vol. 2, No. 2, 1981.

de Marchi, Antonio. "Italian Defense in the 1980's: Part 2." Jane's Defense Review. Vol. 2, No. 4, 1981.

Dicker, Geneva. "Shake-Up in the Italian Naval Industry." International Defense Review. Vol. 15, No. 4, 1982.

Director of Naval Intelligence. Understanding Soviet Naval Developments. Washington, D.C.: U.S. Government Printing Office, 1981.

DMS, Inc. Report on NATO Europe-Italy. 1983.

Dykes, G.K. and Power, J.G. Business Study-Italy. New York: Touche Ross & Co., 1977.

Espenshade, Edward B., ed. Goode's World Atlas. San Francisco: Rand McNally & Co., 1982.

Europe's 5,000 Largest Companies. London: Dunn & Bradstreet International, 1979.

Foss, Christopher F. Ed. Jane's Armor and Artillery 1983-84. London: Jane's Publishing Co., Ltd., 1983.

Foss, Christopher F. Ed. Jane's Military Vehicles and Ground Support Equipment 1983. London: Jane's Publishing Co., Ltd., 1983.

Groeg, Otto J. Ed. Who's Who in Italy. Milan: Grafice Comense, S.R.l., 1980.

Harvey, Robert. "A Kind of Stability." The Economist, July 23, 1983.

Hogg, Ivan V. Ed. Jane's Infantry Weapons 1983-84. London: Jane's Publishing Co., Ltd., 1983.

International Institute for Strategic Studies. The Military Balance 1973-74. Cambridge: Heffers Printers Ltd., 1973.

----- . The Military Balance 1983-84. Cambridge: Heffers Printers Ltd., 1983.

Jane, Fred T. Ed. Jane's Fighting Ships - 1914. London: Sampson Low, Marston & Co., Ltd., 1914.

Keefe, E.K. Area Handbook for Italy. Washington, D.C.: U.S. Government Printing Office, 1977.

Kogan, Norman. The Politics of Italian Foreign Policy. New York: Frederick A. Praeger, Inc., 1963.

Langer, William D. Ed. An Encyclopedia of World History. Boston: Houghton Mifflin, 1972.

Lewis, Jesse E., Jr. The Strategic Balance in the Mediterranean. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1976.

Lunn, Simon. NATO After Afghanistan. Washington, D.C.: Congressional Research Service, 1980.

McMurtrie, Francis E. Ed. Jane's Fighting Ships 1939. London: Sampson Low, Marston & Co., Ltd., 1939.

----- . Ed. Jane's Fighting Ships 1943-44. New York: The MacMillan Company, 1945.

----- Ed. Jane's Fighting Ships 1944-45. New York: The MacMillan Company, 1947.

Moore, J. Ed. Jane's Fighting Ships 1982-83. London: Jane's Publishing Co., 1982.

Neutrality Agreement: Malta-Italy 1980. Valletta, Malta: Ministry of Foreign Affairs, 1980.

Nunn, Sam. NATO: Can the Alliance be Saved? Washington, D.C.: U.S. Senate Committee on Armed Services, 13 May 1982.

Peterson, Philip A. The Soviet Conventional Offensive in Europe. Washington, D.C.: U.S. Government Printing Office, 1983.

Preston, Anthony. Warships of the World. London: Jane's Publishing Co., 1980.

Pretty, Ronald R. Ed. Jane's Weapons Systems 1983-84. London: Jane's Publishing Co., Ltd., 1983.

Roberts, S. "West European and NATO Navies." Proceedings. March 1982.

Shankland, P. and Hunter, A. Malta Convoy. New York: Ives Washburn, Inc., 1961.

Silvestri, Stefano. "The Italian Paradox: Consensus and Instability." The Internal Fabric of Western Security. London: Allenheld, Osmur & Co., 1981.

Sleiter, Giovanni. "Monitoring the Southern Flank." Interavia. January, 1980.

Sokol, Anthony E. The Imperial and Royal Austro-Hungarian Navy. Annapolis, MD: United States Naval Institute, 1968.

Staples, William B. Ed. World Military Expenditures and Arms transfers: 1971-1980. Washington, D.C.: U.S. Arms Control and Disarmament Agency, 1980.

Sullivan, Leonard. "The Real Long-Range Defense Dilemma: Burden Sharing." The Armed Forces Journal. 20 October 1981.

Taylor, J.W.R. Ed. Jane's All the World's Aircraft 1982-83. London: Jane's Publishing Co., 1982.

----- . Ed. Jane's All The World's Aircraft 1983-84.
London: Jane's Publishing Co., 1983.

"The Italian Navy." Navy International. November, 1983.

The Times. History of the War: Volume XII. London: The
Times Publishing House, 1917.

U.S. Congress Senate Committee on Foreign Relations. Crisis
in the Atlantic Alliance: Origins and Implications.
Committee Print (Washington, D.C.: March, 1982).

U.S. Congress Senate Committee on Foreign Relations. NATO
Today: The Alliance in Evolution. Committee Print
(Washington, D.C., March, 1982).

van Kuffeler, F.B. "Italian Naval Shipbuilding." Jane's
Defense Review. Vol. 3, No. 1, 1982.

----- . "Mostra Navale 1982: Warships and Other
Craft." Jane's Defense Review. Vol. 3, No. 5, 1982.

----- . "The Italian 'Maestrale' Class Frigates."
Jane's Defense Review. Vol. 2, No. 3, 1981.

Villar, G.R. "Italian Naval Industry: Will the Export
Success Continue?" Jane's Defense Review. Vol. 3., No. 5,
1982.

Whipple, A.B.C. The Mediterranean. Alexandria, VA:
Time-Life Books, 1981.

Who Owns Whom: 1975-76. London: O.W. Roskill & Co., Ltd.,
1976.

Yost, David A. "NATO's Political-Military Challenges,"
Current History. December, 1982.

PERIODICALS

Economist. 26 January, 1980.

----- . 9 February, 1980.

----- . 22 March, 1980.

----- . 19 April, 1980.

----- . 17 May, 1980.
----- . 21 June, 1980.
----- . 9 August, 1980.
----- . 15 November, 1980.
----- . 27 December, 1980.
----- . 17 January, 1981.
----- . 7 February, 1981.
----- . 16 May, 1981.
----- . 27 June, 1981.
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----- . 24 October, 1981.
----- . 7 November, 1981.
----- . 23 January, 1982.
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----- . 29 May, 1982.
----- . 5 June, 1982.
----- . 12 June, 1982.
----- . 26 June, 1982.
----- . 4 September, 1982.
----- . 6 November, 1982.
----- . 15 January, 1983.
----- . 29 January, 1983.
----- . 12 February, 1983.
----- . 12 March, 1983.
----- . 26 March, 1983.
----- . 23 April, 1983.

----- . 25 June, 1983.
----- . 8 October, 1983.
----- . 15 October, 1983.
----- . 22 October, 1983.
----- . 26 November, 1983.
----- . 28 January, 1984.
----- . 11 February, 1984.
----- . 25 February, 1984.

Foreign Broadcast Information Service. FBIS. Western Europe Daily Report. From 1979 to December 1983.

Interavia. Vol. XXX, January, 1975.

----- . Vol. XXX, May, 1975.
----- . Vol. XXX, August, 1975.
----- . Vol. XXXI, February, 1976.
----- . Vol. XXXI, March, 1976.
----- . Vol. XXXI, June, 1976.
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----- . Vol. XXXII, August, 1977.
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----- . Vol. XXXIII, July, 1978.
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----- . Vol. XXXIV, September, 1979.
----- . Vol. XXXIV, October, 1979.

----- . Vol. XXXV, January, 1980.

----- . Vol. XXXV, March, 1980.

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----- . Vol. XXXVI, September, 1981.

----- . Vol. XXXVII, January, 1982.

----- . Vol. XXXVII, June, 1982.

----- . Vol. XXXVIII, February, 1983.

----- . Vol. XXXVIII, May, 1983.

----- . Vol. XXXVIII, September, 1983.

----- . Vol. XXXVIII, October, 1983.

----- . Vol. XXXIX, January, 1984.

International Defense Review. Vol. 14, February, 1981.

----- . Vol. 14, March, 1981.

----- . Vol. 14, October, 1981.

----- . Vol. 15, April, 1982.

----- . Vol. 15, July, 1982.

----- . Vol. 16, April, 1983.

Jane's Defense Review. Vol. 1, No. 1, 1980.

----- . Vol. 2, No. 2, 1981.

----- . Vol. 2, No. 3, 1981.

----- . Vol. 2, No. 4, 1981.

----- . Vol. 2, No. 5, 1981.

----- . Vol. 3, No. 1, 1982.

----- . Vol. 3, No. 2, 1982.
----- . Vol. 3, No. 5, 1982.
----- . Vol. 4, No. 1, 1983.
----- . Vol. 4, No. 4, 1983.
----- . Vol. 4, No. 5, 1983.
----- . Vol. 4, No. 8, 1983.

NATO's Fifteen Nations. Vol. 22, No. 3, June-July, 1976.

----- . Vol. 21, No. 6, December, 1976-January, 1977.
----- . Vol. 22, No. 5, October-November, 1977.
----- . Vol. 22, No. 6, December, 1977-January, 1978.
----- . Vol. 23, No. 4, August-September, 1978.
----- . Vol. 24, No. 3, June-July, 1979.
----- . Vol. 24, No. 5, October-November, 1979.
----- . Vol. 25, No. 2, April-May, 1980.
----- . Vol. 25, No. 4, August-September, 1980.
----- . Vol. 26, No. 2, April-May, 1981.
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----- . Vol. 27, No. 2, April-May, 1982.
----- . Vol. 27, No. 5, October-November, 1982.

NATO's Sixteen Nations, Vol. 28, No. 2, April, 1983.

----- . Vol. 28, No. 7, November, 1983.

Survival. Vol. XIX, No. 2, March-April, 1977.

- . Vol. XIX, No. 4, July-August, 1977.
- . Vol. XIX, No. 6, November-December, 1977.
- . Vol. XX, No. 2, March-April, 1978.
- . Vol. XXI, No. 4, July-August, 1979.
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